

Design in Finland

- From aesthetic outcomes to strategic input

MSc program in Management and International Business

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Abstract

The strategic use of design has come to prominence in the recent years, when the capabilities of design as a strategic resource that creates competitive advantage, have been acknowledged. Organizations in diverse industries are utilizing design in their operations to gain and learn from customer insights, in order to serve customers better and receive higher profit. The primary objective of this thesis is to make the motivations behind the strategic use of design, and the benefits it can bring to a company transparent. The research is aiming to find whether design is seen as a core component in the heart of decision-making. Additionally, the thesis is examining the main characteristics of organizations that use design strategically.

The research approaches the subject comprehensively in the Finnish context. The purpose of the research is to identify the features, which companies could enhance if they want to accelerate the strategic use of design in their operations. This is achieved by examining the main connections of design and strategy. Additionally, the benefits that the utilization of design can create are made transparent, thus, accessible for all.

The thesis presents a qualitative research in the field of design and strategy. The research method used for conducting and analyzing the empirical research is thematic analysis. The data is gathered via semi-structured interviews with design experts from different industries. Therefore, the thesis provides an expert dataset, with multiple perspectives on the strategic use of design.

The literature review presents an academic perspective for the connections of design and strategy. In turn, the empirical part offers the perspectives of the design professionals. The findings of the empirical research relate to the ones in the literature review, but varies somewhat in the features that are emphasized. Three factors, customer focus, managerial support and organizational mindset, are the key features that characterize a design intensive organization. These findings are part of the three connections of design and strategy, which rose from previous literature; design strategy, design management and design mindset.

Keywords design, strategy, design thinking, design mindset, design intensive organization

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Designin strateginen hyödyntäminen on noussut ajankohtaiseksi aiheeksi viime vuosina, kun designin ansiot strategisena voimavarana, joka luo kilpailuetua, on tunnustettu. Organisaatiot eri toimialoilla käyttävät designia toiminnossaan oppiakseen asiakkaiden näkemyksistä sekä tarpeista, jotta voivat palvella asiakkaita paremmin ja menestyä liiketoiminnassaan. Tämän tutkielman ensisijaisena tavoitteena on tehdä läpinäkyviksi ne motivaatiot, jotka vaikuttavat designin strategiseen hyödyntämiseen, ja etuihin, joita se voi tuoda yritykselle. Empiirisen tutkimuksen tavoitteena on selvittää nähdäänkö design keskeisenä osatekijänä päätöksenteon ytimessä suomalaisista yrityksistä. Lisäksi tämä tutkielma kartoittaa piirteitä, jotka ovat ominaisia organisaatioille, jotka käyttävät designia strategisella tasolla.

Tutkimus lähestyy aihealuetta kokonaisvaltaisesti Suomen kontekstissa. Tutkimuksen tarkoituksena on tunnistaa piirteitä, joita yritykset voivat tehostaa omassa toiminnassaan, kun haluavat lisätä designin strategista käyttöä yhtiön sisällä. Nämä tulokset saavutetaan tutkimalla designin ja strategian yhtymäkohtia. Lisäksi designin strategisella hyödyntämisellä saavutetut edut tuodaan näkyville tutkielman tuloksissa.

Tämä maisterintutkinnon tutkielma on laadullinen tutkimus designin ja strategian alalta. Tutkimusmenetelmänä empiirisen aineiston hankkimiseen ja analysointiin on käytetty temaattista analyysiä. Aineisto kerättiin haastatteleamalla design asiantuntijoita, jotka työskentelevät erilaisilla toimialoilla. Tämän myötä tutkielma esittää useita näkökulmia sisältävän asiantuntija-aineiston designin alueelta.

Kirjallisuuskatsaus esittelee akateemisen näkökulman designin ja strategian yhteyksistä. Vastaavasti tutkielman empiirinen osa tarjoaa design ammattilaisten näkökulmat asiaan. Empiirisen tutkimuksen tulokset ovat yhdenmukaisia kirjallisuuskatsauksen löydösten kanssa, mutta molemmat korostavat hieman eri aspekteja. Kolme tekijää, asiakaslähtöisyys, ylimmän johdon tuki ja organisatorinen mielentila ovat ominaisuuksia, jotka luonnehtivat ja yhdistävät design-intensiivisiä yrityksiä. Nämä löydökset ovat osa niitä kolmea asiaa, jotka kirjallisuuskatsauksen mukaan yhdistävät designia ja strategiaa; designstrategia, design johtaminen ja design mielentila.

Avainsanat design, strategia, design ajattelu, design mielentila, design intensiivinen organisaatio

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1 INTRODUCTION

Strategic design is about crafting decision-making. This works best when design is integrated into the DNA of organizations, creating new opportunities for designers with a strategic aptitude to migrate from studios and ateliers to integrated positions, embedded within organizations and governments. (Helsinki Design Lab, 2015)

Design is one of the terms that are on everyone's lips at the moment. In Silicon Valley, designers are the ones who are taking charge of the companies and strategic design is what differentiates the success stories from the unsuccessful equivalents (Kauppalehti, 2015). Simultaneously as the knowledge and use of design spreads rapidly from consultancies to startup's and further to global listed companies, the term becomes more and more ambiguous. Professionals all over the world are talking about strategic design, design thinking, service design, and design strategy to start with and new sub terms of design are coming up constantly. However, what does design really mean, and how can companies use such ambiguous matter for their benefit?

As the quote above implies, design no longer covers simply products, rather it is about designing solutions to problems. And these problems are customers' problems. The customers do not often know what they want and need, since they do not understand what the initial problem is. This is where design comes in. Design finds the problem, recognizes the latent needs of the customers and answers with an idea, sometimes even an innovation. Design is a hands-on practice, which companies all over the world are utilizing to understand the insights of customer needs and wants, in order to serve them better (Brown, 2008).

Increased international competition, ever-changing environment and technological changes create pressure on organizations to renew their business continuously, be innovative and creative (Gumusluoglu & Ilsev, 2009). Success and growth have been pursued in numerous ways, but recently design has been the main means of competitive advantage, stirring up conversation. Academics and practitioners alike have recognized that design, as a part of the innovation process, is crucial for proactively answering to the challenges organizations meet (Cooper, Bruce, Wootton, Hands, & Daly, 2003). In organizations, the function of design has

traditionally been to bring the finishing aesthetic touch to products, but during the new millennium, design has gained a strategic role in the core of the business (Song & Chung, 2008; Brown, 2008; Miller & Moultrie, 2013). Companies all over the world have recognized the importance of design as a value adding function that stimulates creativity and innovations (Borja de Mozota, 2002). In addition, they are realizing that good design brings value beyond the measurable monetary profits (Cooper et al., 2003). As a result of matching customers' demands and wants with new and innovative concepts, design creates wealth for the company, and thus, can be a strategic resource in organizations (Topalian, 2002).

Although design is increasingly seen as a crucial part of actions, especially in businesses that operate in fast-changing industries (Miller & Moultrie, 2013), it can still be easily mistreated and left outside the innovation process, because organizations have insufficient knowledge about the topic (Cooper et al., 2003). Some organizations have not realized the strategic role of design, where design is a tool to create competitive advantage (Jun, 2008). These organizations are lacking of design mindset and the ability to "think like a designer". Companies are pursuing incremental improvements (Hamel, 1996) while strategic design has the power to transform them and their mindset (Borja de Mozota, 2006). Therefore, this thesis is aiming to find the most important elements in creating the design mindset in organizations; information that would help organizations to utilize design strategically and receive the benefits it can bring.

1.1 Research questions and objectives

In order to discover if the importance of using design strategically has been understood in Finnish companies, this thesis has a main research question: *To what extent Finnish companies use design as a strategic core component?* The research question is aiming to find whether design is seen as an important part of business, and in the center of the decision-making, in Finnish companies. In addition, the research question uncovers to what extent the top management is participating and supports the strategic use design. This question is descriptive in quality and has strategic design in its central focus. The context of this question makes it an empirical question. Therefore, two sub-questions were formulated to search answers from

the theoretical perspective. The first one is interested about how two seemingly different areas, design and strategy, intertwine and asks: *What are the connections of design and strategy?* The second question is more specific and explores the different features that characterize the strategic use of design: *What are the factors of using design strategically?* Essential piece of information that this question offers is the benefits of using design strategically. To answer these research questions, literature about strategies in general, design strategies in different contexts, and design management is discussed in the literature review.

The area of the strategic use of design is fairly little researched in the context of design management. In Finland, there is academic research about design strategies (Person, Schoormans, Snelders, & Karjalainen, 2008) and the managerial practices of design management (Noukka, 2011) but the research area is still quite new. In a wider context, the connections of design and strategy have been studied separately. For example, Borja de Mozota (2006) examines the different benefits and values design can bring to an organizations, and how managers can utilize these to create material and immaterial value for the company. In turn, Brown (2008) focuses on design thinking as a strategic design method in his research. Nonetheless, Fraser (2007) is close to the topic of this thesis when she examines how the methods and mindsets of design can be used in organizational practices such as strategic planning. Furthermore, Borja De Mozota (2003) has an entire chapter about design and strategy in her book "Design management: Using design to build brand value and corporate innovation", but it includes only short examples, not scientific research. Thus, there is a niche for empirical research in the area, and as all the aspects of design and strategy are such an interconnected bundle of different concepts, they need to be examined as a whole.

When I started to think about the subject of my thesis, my initial thought was to continue with the topic of my bachelor's thesis that concerned managing creative work. The thought developed from there to cover the field of design and strategy. In my studies, I have already combined the two areas by specializing in Strategy Work in my master studies and having International Design Business Management as a minor. Therefore, it was quite natural step to have them both as core concepts of my thesis. They are two interesting areas of research separately, but put together, they create countless possibilities for research and

interpretation. After deciding on these two aspects, I narrowed down the focus and decided to do research on design strategy work in Finnish organizations. With this mindset, I wrote the first draft of the literature review and conducted the interviews. However, the empirical research guided the thesis to a wider path, since I noticed that design strategies by themselves are somewhat insufficient in representing the actual benefits that the connections of design and strategy can bring. Consequently, the empirical part had a great influence on the content and structure of the whole thesis. Nonetheless, the two areas, design and strategy, are still in the main role in this thesis, just in a wider context of using design strategically in Finnish companies.

1.2 Introduction of research methodology

This thesis is a qualitative research in the field of design and strategy. It is an overview of how design experts see the current situation and the future opportunities of using design strategically in Finnish context. All qualitative data is varied and complex, and there are multiple ways to interpret it. To collect and interpret the empirical data for this thesis, I chose thematic analysis as the research method. I considered that thematic analysis is the most appropriate method to connect the different perspectives under a coherent storyline. This research method is based on the fact that all qualitative data, however nuanced it is, has patterns. With thematic analysis, these patterns, i.e. themes, are identified, analyzed and reported. Thematic analysis is a simple analysis method that can serve as a foundation for other qualitative research methods, but is still relatively unexploited in academic research. (Braun & Clarke, 2006)

The empirical data was collected as semi-structured interviews with design experts. This provided an expert dataset; several diverse perspectives of the strategic use of design in Finnish companies. The form of the interview questions and the analysis of data were influenced by the philosophical view of critical realism. Thus, the interviews were analyzed as interpretations of the world and with the knowledge that the interview situation affected what was said and left unsaid (Eriksson & Kovalainen, 2008). The methodology and analysis of the empirical data is further discussed later in this thesis.

1.3 Key concepts

There are some key concepts that need to be introduced before the findings of the academic and empirical research are presented. All the terms displayed in the next paragraphs are relevant in order to understand the topic of this thesis. To clarify the area and create coherence, an umbrella expression for all of these concepts is defined as the **strategic use of design**. Using design strategically is about utilizing design solutions and methods in everything that concerns the offering for the customer, such as the guidelines for the R&D process and the communication of brand and product for the market (Jun, 2008). This concept is used throughout the thesis to connect all the other terms presented in this chapter. It describes the actions and features that are used in organizations where design has a strategic role.

According to Jun (2008) design has a strategic role in the company, if it is visible that the offering fits the needs of the customer. In other words, these are **design intensive** organizations where design has been acknowledged as a core competence that brings both material and immaterial value. Additionally, these organizations have realized that by being multidisciplinary and diverse in its approaches, design can bring perspective and benefits for all business ventures. The organizations that use design strategically have a **design mindset**. This implies that the organizational structure and culture is open for exploration, collaboration and iteration (Fraser, 2007). Consequently, these organizations are using **design thinking**; employing design tools and methods to answer to the needs of their customers better (Brown, 2008).

The basic element of this thesis, design and strategy, and their closest connections are defined next. There are multiple definitions for **design**. Traditionally design has been seen as art: something abstract and creative, rather than a manageable process. Cooper and Press (1995) define design as an interdisciplinary activity that combines customer desires and company goals by providing aesthetic products and services that are resource-efficient, functional, applicable, and of good quality. Olson, Cooper and Slater (1998) add to this description that design has a central function linking technology and the marketplace, by providing new technologies to customers as comprehensible products and services. Cooper et al. (2003) sees design as the 'creative engine' keeping the development of new products and services on going.

Olson et al. (1998) further explain the vagueness of the term, and how it is used to describe three different aspects: an artefact and its features, a process used to make form for all things and objects, and a profession of certain experts. In this thesis, the term design is understood with this perception: all the outputs of a design process, the process itself and the human action behind it. In fact, this view displays design more as **strategic design**, than as traditional design, since it is concerned about finding solutions to (customer) needs and problems, not simply focusing on the process outcomes. It is about designing the solutions in a manner that considers the problem holistically within its ecosystem. (Sitra, 2015)

Strategy, as a concept, is as ambiguous as design and has no universal definition. As a term, it derives from the warfare terminology and represents the general planning of major combat operations. In organizational theory, one definition is that strategy is the long-term plan for company's actions (Johnson, Whittington, Scholes, Angwin, & Regnér, 2014) that join together organization's visions, goals, procedures, and practices (Mintzberg, 1998). According to Mintzberg (1998), most people define strategy as a plan, a direction, something linear leading forward, but in practice it is more a pattern that consistently follows past behavior.

Hamel (1996) presents the definition that best serves this thesis; strategy is revolution, if the company is willing to change accordingly. It is more about discovering new opportunities than planning actions (Hamel, 1996). "Inquisitive, expansive, prescient, inclusive, demanding" (Hamel, 1996, 70) are all words that could be used to describe strategic design and therefore **design strategy**, as well. At least this is the desired form of design strategy: revolution that is constantly renewing the organization.

In reality, there are countless definition for design strategies. Even though strategy, as mentioned earlier, has reach a particular definition used in both academic literature and practice, it seems that what comes to design strategies, the "wheel" is constantly reinvented. There are as many definitions as there are design strategies. (Cooper et al., 2003; Olson et al., 1998). Best (2006, p.50) describes that "Design strategy is the effective allocation and coordination of design resources and activities to accomplish firm's objectives of creating its appropriate public and internal identities, its product offerings, and its environments." Furthermore, Borja de Mozota (2003) adds that a design strategy is a plan for spreading design throughout the organization, its departments, processes and practices.

1.4 Structure of the thesis

The structure of this master's thesis follows the basic instructions for academic research paper. There are five chapters that present each phase of the research: introduction, literature review, methodology, empirical research, and conclusions. *Chapter 1* introduces the research area and gap in the previous research. Additionally the key concepts and the methodology of the thesis are defined in this chapter. *Chapter 2* is the literature review and presents an academic perspective for the connections of design and strategy. This chapter also includes the research framework displaying the features of the strategic use of design. *Chapter 3* further explains the research design and methodology used in the data collection and analysis process. The findings of the empirical study are presented in *chapter 4*: The strategic utilization of design in Finnish companies. This chapter is structured based on the research framework, including the most important themes and topics of the expert interviews. *Chapter 5* displays the results of empirical research and connects them with the academic research. Furthermore, the limitations of the research are presented in this chapter.

2 THE CONNECTIONS OF DESIGN AND STRATEGY

This chapter will introduce three occurrences where design and strategy are intertwined: design strategy, design management and design mindset. However, before the three aspects are presented, the thesis will look into the strategic power and benefits design can have in an organization when it is used strategically. The chapter will start by beholding the different stages, where organizations can be according to their design intensity. The level of design intensity reveals how well and in-depth they have utilized the connections of design strategy.

Organizations vary a great deal in design intensity (Borja de Mozota, 2006). The Danish design ladder (Ramlau, 2004) displays the different stages of design intensity that goes from having no design, to design being a strategic core component (Figure 1). In the first stage, design is a hidden actor in the company. It does not mean that design does not exist in such organization, since customer offerings are always designed in some way. Nevertheless, what it actually means is that design's role in the organization's actions has not been recognized. (Ramlau, 2004) The second step of the ladder, design as styling, relates to the traditional view of design concerning merely the finishing touches of products (Song & Chung, 2008). The third stage is coming closer to seeing design as a strategic component in business, since it views design as a process rather than simply the outcome of the process (Olson et al., 1998). However, for this research the most important stage is the fourth: design as strategy. This is where design and strategy are connected in operations and where the biggest success is achieved (Ramlau, 2004). Additionally at this stage, design has transforming value that affects the whole organization (Borja de Mozota, 2003).

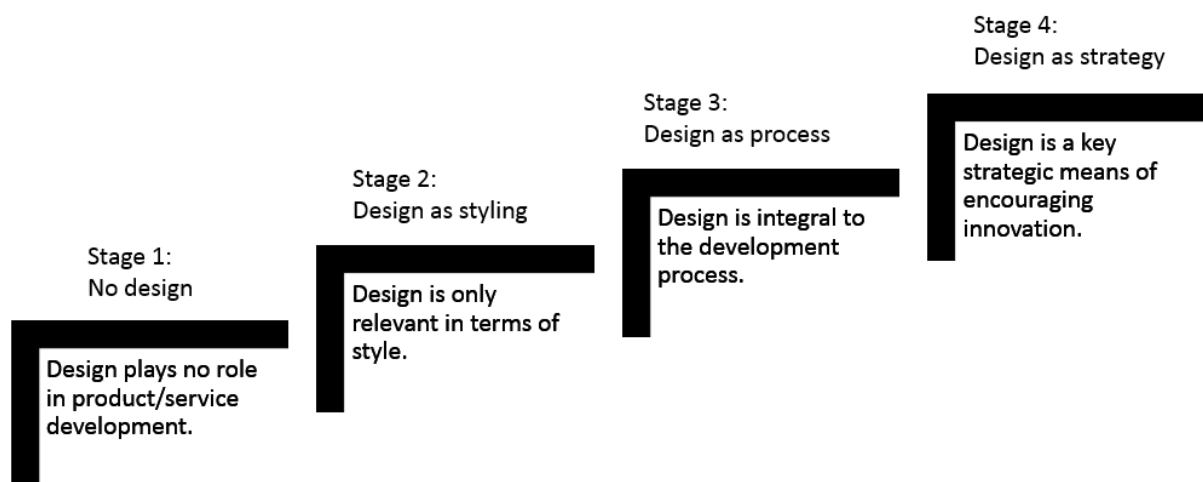


Figure 1: The Danish design ladder (Ramlau, 2004)

When the fourth stage of the Danish design ladder is reached the strategic power of design can be identified. Borja de Mozota (2006) presents four powers of design: design as differentiator, design as integrator, design as transformer, and design as good business (Figure 2). All these powers are strategic by nature, bringing diverse benefits such as competitive advantage and coordination of multiple disciplines under R&D process (Borja de Mozota, 2006). The power that is interesting for this research is design as transformer, since it is the most strategic power that design has (Borja de Mozota, 2003). When the focus is on creating design mindset in an organization, design needs to act as transformer, creating new business opportunities and interpreting the business environment (Borja de Mozota, 2006). From this viewpoint design is a strategic tool bringing revolution to the organization (Hamel, 1996). Hamel (1996) implies that revolution, radical transformation, is needed in all organizations who want to exceed their competitors. Design is a current means for this revolution.

<p>1. Design as differentiator: Design as a source of competitive advantage on the market through brand equity, customer loyalty, price premium, or customer orientation</p>	<p>3. Design as transformer: Design as a resource for creating new business opportunities; for improving the company’s ability to cope with change; or (in the case of advanced design) as an expertise to better interpret the company and the marketplace</p>
<p>2. Design as integrator: Design as a resource that improves new product development processes (time to market, building consensus in teams using visualization skills); design as a process that favors a modular and platform architecture of product lines, user-oriented innovation models, and fuzzy-front-end project management</p>	<p>4. Design as good business: Design as a source of increased sales and better margins, more brand value, greater market share, better return on investment (ROI); design as a resource for society at large (inclusive design, sustainable design)</p>

Figure 2: The four powers of design (Borja de Mozota, 2006)

Besides design being a transformer, design as good business is an interesting power, since this thesis is also looking into the benefits that design can bring to an organization. Often companies do not know how to exploit design so that it would benefit company profitability or at least do not have parameters to measure it (Cooper et al., 2003). Some ways to measure the tangible profitability of design have been developed. For example Antti Pitkänen (2012) and his colleagues developed a model to measure return on design investment (design ROI). However, measuring the gross effectiveness of design is problematic since in addition to financial benefits, successful design provides the company with intangible worth by creating brand awareness and emotional connection (Cooper et al., 2003). Cillo and Verona (2008) call this 'symbolic value'. Despite of the challenges in measuring the immaterial value, it is well recognized in research. For example, Topalian (2002) considers design as a strategic resource, since it is a central action in value creation for the customer, and can give an answer to the market demand. In conclusion, effective design is beneficial to business since it nourishes innovation, answers to both customer and other stakeholder needs and creates monetary value (Cooper et al., 2003). Therefore, recognizing the importance of the strategic use of design is crucial for business and needs further examination.

2.1 Design strategy

The initial focus of this thesis was design strategies as the key connector of design and strategy. Hence, design strategies are emphasized in the literature review over strategic design. Having a design strategy is one of the features that characterize a design intensive organization. Design strategy is the observable evidence that a company has acknowledged the importance of design as a strategic core component. Therefore, the following paragraphs will present the features and usage of different form of design strategies.

Design strategy is about serving people... The real challenge is in trying to solve the human problem. It's about understanding their needs, their aspirations, and then meeting them in some way. So we are serving them. But sometimes their needs are to be surprised and delighted, and they can't tell us how to surprise and delight them. That has to come from us as creative people in our profession. (Hosmer, 2009)

The term design strategy is commonly used to describe visions about strategic outcomes in the field of design (Jun, 2008). Olson et al. (1998) presents three different types of design strategies: “design of corporate identity and communications, saleable products, and environments” (Olson et al. 1998, p. 61). In other words, design strategies do not only cover the planning and production of end products but extends to organizational spaces, brand identities, corporate values, stakeholder image etc. (Borja de Mozota, 2003). Olson et al. (1998) reminds that these strategies are not separate issues and need to be seen as a comprehensive vehicle that drives the organization towards its vision. What comes to strategy, the whole is greater than the sum of its parts (Borja de Mozota, 2003). Design strategy is a means to bring the whole together, by being a crosscutting action plan that coordinates different functions and actions to perform jointly (Jun, 2008). This strategic fit of integrated entities is crucial for the success of the strategy and strategic design (Borja de Mozota, 2003). Olson et al. (1998) emphasize that these strategic matters are not solely the territory of design, but relates to all the other functions in the organization as well.

There are multiple ways to look at the foundations for design strategies in an organization. Borja de Mozota (2003) explains that design can be strategically positioned as either innate or acquired. The former concerns companies, which have had design as their core competence from the start. In these companies, design has a truly strategic role and it operates throughout the company and all its processes. The latter involves organizations where design is learned and promoted to core competency by experience. (Borja de Mozota, 2003) Noble and Kumar (2008) categorize design strategies according to functional diversity and emotional effectiveness to three groups: utilitarian, visual, and kinesthetic. Companies that pursue utilitarian design strategies focus on creating comprehensively better products by technical and operative features and engage to functional differentiation. In turn, applying visual design strategies directs the emphasis on emotional value creation by invoking customer’s attention visually. Kinesthetic design strategies focus on the physical user experiences and thus, create a feeling of functional superiority, which further leads to creating an emotional connection to the products. (Noble & Kumar, 2008)

The visions and targets for design strategies are generated from the company's business strategy (Borja de Mozota, 2003). However, design strategies are somewhat different in their approaches from the overall business strategies. Design strategies are characteristically more strategy as practice, than strategy as formal planning. This is the consequent of design strategies being about 'doing strategy' rather than just planning on doing it. In fast-paced fields such, as design, the dynamic approaches of strategy as practice are suitable, since they allow the company to rapidly react to market demands. (Whittington, Molloy, Mayer, & Smith, 2006) Whittington et al. (2006) explain that the detailed formality of traditional strategizing is beneficial for the practice perspective as well, but it might involve too much analysis and be detached from the actual work. When design strategy is considered from the practice view, it can be more flexible and proactive in its approaches (Borja de Mozota, 2003). The iterative and creative nature of design is aligned with the 'crafting' approaches of strategy as practice (Whittington et al., 2006), thus making it suitable for forming design strategies (Brown, 2008; Borja de Mozota, 2003).

What comes to formulating design strategies, it requires a collection of talents and functions to come together. It is a delicate process involving people with different interest and motivations. It calls for interpersonal skills (Whittington et al., 2006) to manage these people in an orderly way, but also in a manner that allows them to use their full potential as creative beings (Amabile, Schatzel, Moneta, & Kramer, 2004). It is essential to recognize the interfaces of design and other functions, in order to apply its full strategic power (Cooper et al. 2003; Cillo & Verona, 2008). To make the process lean, the communication channels should be open and accessible for all (Whittington et al., 2006). Finally, the outputs of design strategies are meant to communicate company values, be individually identifiable as a certain company's product or reflect the whole product range recognizably (Simoni, Cautela, & Zurlo, 2014).

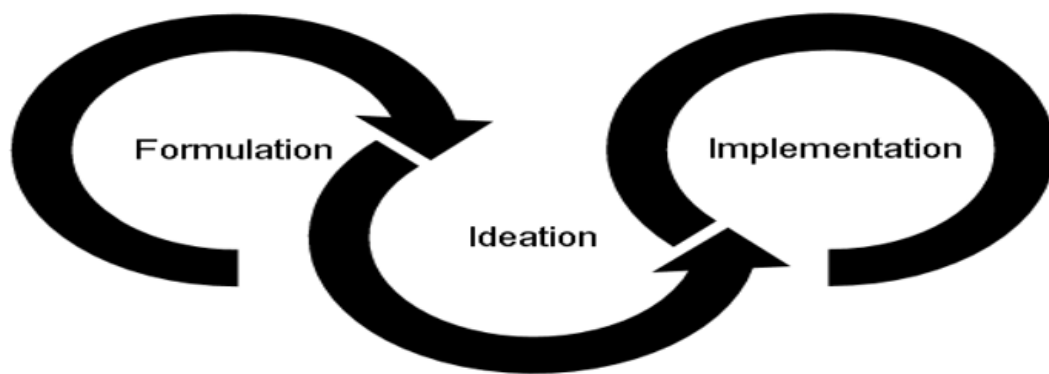


Figure 3: Design strategy process

Figure 3 displays three phases of the design strategy process: formulation, ideation, and implementation. The design strategy process is iterative in each stage. There are different perspectives on the process of making and implementing strategy. The practice approach on strategy implies that the strategy process is constant, the phases are not separate, and the formulation and implementation of the strategy happens simultaneously (Whittington, 1996). On the contrary, the phases can be seen as distinct stages of a linear process (Borja de Mozota, 2003). As displayed in the figure 3, this thesis separates the phases of the design strategy process, but acknowledges that they affect each other and sometimes are concurrent. According to Jun (2008), design strategy is about planning and guiding the brand and product development and design management is more about implementing the design strategy. Therefore, this part of the literature review focuses on the first phase of the strategy process and later on, the implementation of design strategies is touched upon with the topic of design management. Some features of the ideation phase can be found in the current section of the literature review, since it concerns strategic visioning. In the next paragraphs, two objects for design strategies, customer offerings and corporate identity are introduced. These relate to Olson et al. (1998) vision of design strategies, presented above, that includes saleable products, corporate identity and organizational environments.

2.1.1 Design strategy for customer offerings

This section displays the strategies for designing products and services, and the processes behind the designs. Everything a company offers for a customer is designed and there is a set of decisions to be made about every design. Olson et al., (1998) argue that these decisions about product design draws from the definition of design; how can we make the offering attractive for the customer both aesthetically and for its technical features, and how to find the right balance between price and quality. Jun (2008) calls the factors affecting design decisions “positional forces” and presents five forces; culture, branding, costs, services and technology. All of them affect the decision-making process in both design strategies for customer offerings as well as for corporate identity (Jun, 2008). When these decisions and forces for different customer offerings are in line with each other, they can be perceived as strategic design decisions. (Olson et al., 1998) Connected with a common thread, they make a product design strategy. Jun (2008) argues that if a company utilizes design strategy effectively it will create successful products.

Decisions about different design strategies have a great impact on company competitiveness and for this reason, it is vital that leaders evaluate carefully all strategic choices (Simoni et al., 2014). Organizations tend to keep the same design strategy even in situations where trends and technologies change (Cillo & Verona, 2008; Simoni et al., 2014), because change easily meets resistance and creates issues. An exception to this is when technological shifts create a need to develop new design strategies to be according to the choices about the product language (Simoni et al., 2014). Thus, design strategies should be always evolving from the previous strategic decisions. Simoni et al. (2014) reminds that not all the strategic decisions that have been profitable in the past, are as effective when applied again.

Simoni et al. (2014) presents two strategic design challenges that companies commonly encounter: the innovativeness of product language and the heterogeneity of languages of their product range (Simoni et al., 2014). The first challenge is to deliberate whether a company should be proactive in bringing new design languages to markets or be more reactive in their strategic design decisions (Dell'Era & Verganti, 2007). In other words, the company should decide whether to have a design strategy that aims for differentiating or instead similarity, compared to the competitor (Person et al., 2008). The second concerns

resemblances between different products in company's product portfolio, should they reflect each other or be considered as individual offerings (Dell'Era & Verganti, 2007). Person et al. (2008) add one other dimension to the strategic decision-making: the succession of the product generations.

If a company chooses to alternate their design strategies according to changing technologies and therefore changing product languages, it may end up with an incoherent product portfolio, but at the same time receive opportunities to create new and innovative outcomes (Simoni et al., 2014). Companies tend to differentiate the styling of their products more if the products are already well known in the market (Person et al., 2008). On the other hand, if a company decides to follow the single language strategy, it may generate problems when entering market to compete with other actors that are more resilient to changes in technologies and trends (Simoni et al., 2014). However, organizations that are new in the market usually try to keep their product portfolios coherent and similar in style language, in order to communicate the brand better (Person et al., 2008).

Companies that follow the market trends in their product styling take advantage of the already established technologies with lower costs, and promote the appropriateness of their products in the market (Simoni et al., 2014). Experienced designers with no formal education most often choose the similarity strategy (Person et al., 2008). Some companies are bold enough to establish a design niche of their own, and aim for being a trendsetter. Fresh-from-school designers presumably take this direction (Person et al., 2008), since choosing this strategy creates high risks (Simoni et al., 2014). Companies tend to prefer differentiation of product language and styling in all three dimensions: portfolio, competition and generations, if the design strategy concerns products and brands with symbolic value, because they want the new products to stand out from the portfolio (Person et al., 2008). The symbolic value can be created through communicating corporate identity.

2.1.2 Design strategy for corporate identity

As mentioned earlier, design strategies concern much more than the planning and production of end products. They cover also all aspects of corporate identity; environments,

organizational culture, brand characteristics, stakeholder image, communication etc. (Olson et al., 1998). These factors are visual and verbal representations of the organizational identity, and should be considered in the design strategy, since they involve design (Borja de Mozota, 2003). Some companies are very subtle in building their image for the public i.e. some household products that exist in every home, but whose brand awareness is minimum. Others are bolder in their strategic approaches of corporate identity communication, for example international brands that base their success in brand identification. (Olson et al., 1998) When the design identity is extremely recognizable throughout the company history, it usually relates to a highly design-minded design leader or influential designer, who has recognized the importance of design as a strategic core component and pushed through using design strategically (Cillo & Verona, 2008).

Corporate identity is communicated to the customer through visual symbols like the logo and the physical environment of the company (Borja de Mozota, 2003; Olson, Cooper, & Slater, 1998). The design strategies of these visual representations need to take into consideration that they express the company values and personality (Olson et al., 1998). However the identity needs to be thoroughly thought through and formulate a coherent entity, since the symbols only reflect the identity, instead of creating it (Borja de Mozota, 2003). Borja de Mozota (2003) separates two different spatial identities; commercial spaces and workspaces. Designing the former is a way for the company to position itself in the market, differentiate from the competitors, and emphasise customer buying habits (Borja de Mozota, 2003). Design strategy for commercial spaces involves with architecture of the space, matching the exterior with the interior design, and landscaping (Borja de Mozota, 2003; Olson et al., 1998). Workspaces influence the attitudes, comfortability, and safety of the employees (Olson et al., 1998). Lastly, all these factors have an influence on how desirable the company is in the eyes of potential customers and employee.

Stakeholder image is a factor of design strategies that involves the outside stakeholders and the company employees. The strategic design decisions such as choosing the visual identities of the company, deciding on the layout of product brochures or annual reports, and adopting a coherent communication style, create a process of communication for the external stakeholders (Borja de Mozota, 2003). As discussed earlier, design profession is one of the three occurrences of design (Olson et al., 1998). Design strategy can operate as a strategy for

the design function (Borja de Mozota, 2003) making the management of designers, the creative engine of the company, a strategic issue.

2.2 Design Management

Design management is the most important facilitator of the strategic use of design. As Bruce and Bessant (2002, 38) say, “Good design does not emerge by accident, but as the result of a managed process”. Therefore, the literature review will now explain what design management is, how it operates in an organization, and what is required from design manager and leaders.

Design management as a practice has existed from the beginning of industrial design, since already then there were managers who oversaw the designers work, processes and the whole design function. The interests towards design management arose in the 1960s in the United Kingdom. During the decade a new professional title, design manager, was introduced. This profession was created to administrate the design projects and to handle the communication between design agencies and their clients. Design management as a research topic was established in the beginning of 1980s when several researchers seized the opportunities of design management in academia. (Borja de Mozota, 2003)

However, until the end of the last century, design was still considered as a secondary action in business. Managers did not possess knowledge and skills that design management required and correspondingly designers had a vague understanding of business practices (Olson et al., 1998; Borja de Mozota, 2006). Olson et al. (1998) explain that this created a wide gap between designers and managers, who, without a shared knowledge of design in business, did not fully understand that design could be more than just art and aesthetics. Currently the concept of design management is still somewhat unclear in several companies. Sun, Williams and Evans (2011) explain that since organizations lack understanding about design management, the managers are searching for best practices in design management from existing knowledge and studies. Coincidentally, alongside the changes in the design industry, the development of design management research has been reactive, following theories and practices as they surface, making it a closed loop from practice to academics and vice versa (Sun et al., 2011).

Borja de Mozota (2006) argues that businesses are moving from project-based to knowledge-based processes by creating a common understanding between designers and managers. This understanding is produced with the help of different toolkits that both parties are familiar with (Borja de Mozota, 2006).

Design management derives from the flexible and nonhierarchical organizational structure and managerial practices that give way for employee initiatives, empowerment, and risk taking (Borja de Mozota, 2003). Design management is a means to implement the strategic design decisions by managing resources, operation, and planning of design actions (Jun, 2008). It coordinates the crossing points of design practices and other activities in a company, both internally and externally (Sun, Williams, & Evans, 2011). Design management concerns the guidelines of what is required from designers' work, matching the right processes, people, and support systems to accomplish high quality (Cooper et al., 2003). In addition, Sun et al. (2011) describe that design management administrate the knowledge input of employees, to produce and establish design outputs that are insightful and have distinguish features compared to rival products.

In particular, management and organizational structure are seen as major factors and enablers of individual creativity (Amabile & Khaire, 2008; Kallio & Kallio, 2011; Mumford, Gaddis & Connelly, 2003). Therefore, they are significant factors affecting also design activities. Researchers have recognized an organizational structure that consists of three decisions-making levels of design management: strategic, tactical and operational (Sun et al., 2011; Best, 2006; Borja de Mozota, 2003). The different levels affect the implementation of strategic decisions in an organization (Joziassse, 2000; Jun, 2008). Figure 4 presents the levels and the size of the step indicates the importance of design in each level.



Figure 4: Levels of design management

At the operational level design management administrates the day-to-day design actions (Best, 2006) and is concerned of tangible issues such as product and service design decisions and directing resources for design projects, and additionally the communication and marketing of the products and services (Borja de Mozota, 2003). Thus, it involves the strategic decisions made for the customer offerings. Operational level decisions are critical for success on the tactical and strategic levels, since they ensure the right allocation of material and human resources, and guide the procedures (Johnson et al., 2014). The tactical, or functional, level broadens the scope of design management from products and projects to the managerial issues of the design department (Borja de Mozota, 2003). It covers the whole design process by coordinating teams, systems, and processes in the design unit (Best, 2006). At the strategic level, the most important design management action is integrating design to the overall strategy and vision of the organization (Best, 2006).

In addition, design management should ensure that all strategic design decisions are made in line with the business strategy and corporate identity (Borja de Mozota, 2003). The strategic level issues include the organization as a whole, and are concerned about how value is created throughout the company with design (Johnson et al., 2014). The decisions in the tactical and strategic levels of design management relate to design strategy for corporate identity, presented in the previous section. To fully utilize the benefits of design as the main component in understanding customer insights and acting on them, design management should operate at least on the functional level of the organization (Gloppen, 2011). Furthermore, to be effective on strategic level, design needs to have a strong presence and performance in both, operational and tactical levels (Joziasse, 2000).

What comes to design managers, Miller and Moultrie (2013) differentiate two types of practitioners. First are design managers: experienced designers who have a formal design education and work by day-to-day basis with design. The second is managers of design, a group that includes every other manager who works with the design function and activities in non-design managerial tasks, but in the touch points with other functions. (Miller & Moultrie, 2013) Miller and Moultrie (2013) call the first group 'true' design managers, since they are the visionaries, who drive others toward the goal of design strategies. The tasks of the second group are wider, and as Sun et al. (2011) discuss, the undertakings of design managers cover

multiple areas from managing design activities, to human resource management. Other issues that concern design managers include knowledge and experience sharing, attaining new and non-conventional skills both for their selves and for their employees, solving the dilemma of open innovation vs. intellectual property rights, cooperation with competitors, performing as a design champion/agent for the top management, and advocating 'design thinking' throughout the organization (Sun et al., 2011).

What is the key in leading creative people strategically? Topalian (2002) argues that managing design and designers demands a diverse set of skills compared with regular management. Miller and Moultrie (2013) continue by saying that leading creative workforce, such as designers, requires extensive experience in the field of design management. They argue that design management roles are often available only to people with formal design education and experience in the field, since they are the ones who possess the appropriate skills. Having a similar educational background and work experience, builds a direct bridge for open communication and shared language between design practitioners and managers. (Miller & Moultrie, 2013)

As the relationship between managers and their subordinates is an important factor in emphasizing design in the organization, researchers are acknowledging the importance of design leadership, besides design management (Borja de Mozota, 2006). Design leadership is more strategic than design management, since it involves the organizational vision of utilizing design to achieve strategic targets (Gloppen, 2009). It can be argued whether one person can be both a good manager and a strong leader, and Kotler (1990) comments that some people do not have the ability. Still researchers state that management and leadership are different sides of the same coin (Amabile et al., 2004), but often one of the sides is more dominant in a person.

Both leadership and management are needed in order to succeed in business (Kotter, 1990). Many design leaders have been found to practice ambidexterity in their management styles, since they have the position of a manager and the knowledge and sensibility to understand the design demands due to their experience in the profession (Miller & Moultrie, 2013). However, neither one of those roles work by itself. Without good management there can be distortion of structures, functions, and actions. In turn, without good leadership the main

strategic actions and decisions might be dismissed (Kotter, 1990). Consequently, the ambidexterity with design management and leadership is noticed to be important in implementing and promoting strategic design decision and actions (Miller & Moultrie, 2013).

Design leadership is a relatively under researched area (Topalian, 2002), but the relations between leadership and creativity have been studied extensively (Zhang & Bartol 2010; Amabile & Khaire, 2008; Reiter-Palmon & Illies, 2004; Mumford et al. 1991). As stated in the introduction organizations have recognized the importance of design as a value adding function, which stimulates creativity and innovations (Borja de Mozota, 2002). However, skepticism, whether creativity in general can be managed at all, have risen in particular amongst the practical business actors because creativity is considered very abstract and shady (Amabile & Khaire, 2008). Amabile and Khaire answer to this critic: "One doesn't manage creativity. One manages for creativity." (Amabile & Khaire, 2008, p.102)

The multidisciplinary role of design is fundamental in managing the design workforce strategically, since "effective design is integrated design" (Topalian, 2002, 15). The most important task of leaders of the creative workforce is to build a creative knowledge environment that fosters collaboration, ideation, and implementation of creative outputs (Denti & Hemlin, 2012). When the interfaces between design and other functions are managed well, a company ends up with innovative and creative design ideas about new technologies that combine with exceptional products (Cooper et., 2003).

2.2.1 Managerial support for design

The most design intensive organizations are the ones where the top management supports and promotes design (Barngrover, 2005). In order to make design a strategic part of the business, specific efforts are required from design-minded executives (Lockwood, 2002). If the company and its management do not advocate design, it will never reach a strategic position in the organization (Barngrover, 2005). As said, design management should operate in the tactical or strategic level of the organization (Gloppen, 2011) in order to receive the right resources from the top management (Sun et al., 2011). The absence of support from top

management can lead to failure of design projects and the overall utilization of design (Bruce et al., 1999).

To spread and promote design to the whole company, design “champions” or “agents” are needed (Borja de Mozota, 2003). A design agent is a person who lobbies design for the rest of the organization, fosters the use of strategic design methods, and then gradually lets design intensity grow organically in the organization (Jevnaker, 2000). These agents are most effective if they are in managerial positions (Barngrover, 2005). Managers who understand the value and concepts of design can teach others about the subject down the organizational structure. These promotional actions of the design champion are strategic by nature (Jevnaker, 2000). However, there are also ways to promote design bottom-up. Jevnaker (2000) discusses that dual champions, a manager and a design expert both emphasizing and using design, are proven successful in organizations. In these situations, the initiatives of strategic design can come either from the designer or the manager. The source of the initiative becomes insignificant, if both parties support the idea (Jevnaker, 2000). Nevertheless, the managerial support is still a key factor in the situation with dual champions, since the manager is involved. Barngrover (2005) adds that a design intensive organization is full of design champions or agents, since all employees understand the benefits that design can bring to an organization and want to encourage others to use it strategically.

2.3 Creating design mindset

This section of the literature review presents the ultimate enabler of the strategic use of design in organizations; the corporate culture that is based on design mindset. The factors allowing, as well as the issues hindering the change in mindsets, are discussed next. Additionally, design thinking as the most effective tool for creating design mindset is displayed.

Design mindset can refer to an individual’s mindset, but in this thesis, it is used to describe the mindset of a company that has an open attitude towards creativity and innovation, and most importantly, uses design strategically in its operations. In companies that have design mindset, collaboration is open and expected from all, since creativity ignites from different ideas and

insights. Additionally, abductive thinking, exploration, iteration, and failure are accepted and even encouraged. (Fraser, 2007) Creating innovation without prior information or knowledge of the viability of the idea, and iteratively searching for the right concept without fearing failure are rudimentary actions of design (Brown, 2008). These features characterize a design-minded organization.

In the ever-changing business world, increased international competition and technological changes create pressure on organizations to renew their business continuously and to be innovative and creative (Gumusluoglu & Ilsev, 2009). Fraser (2007) argues that there are several forces affecting on companies, and these forces require change in the way organizations operate. These forces include globalization, new technologies, risen customer expectations, and corporate responsibility (Fraser, 2007). To respond to the pressuring forces, Nussbaum (2005) argues that there is a shift from knowledge economy to creativity economy. This is the result of companies focusing more on innovations and imagination, and outsourcing the core actions of the knowledge economy: creating cost efficiency and evaluating quality measures (Nussbaum, 2005). However, not all companies are ready for this change. The organizational structures and cultures are too rigid, making them slow to respond to the new needs. Consequently, design has an opportunity to bring its approaches and create design mindset in the organization, which will help not only to make the change, but also to proactively adjust to the new forces (Fraser, 2007).

Nussbaum (2005) presents the evolution of a company from the knowledge-based to creativity-based economy (figure 5). The role of design as a significant driver for growth is displayed in the fourth phase, and design strategy as a strategic design method in the previous phase. The creative company is unarguably a design intensive company that has a design mindset and organizational culture that is open for innovation. Thus, the creative company has gone through a transformation by allowing design to penetrate its processes and functions (Borja de Mozota, 2006).

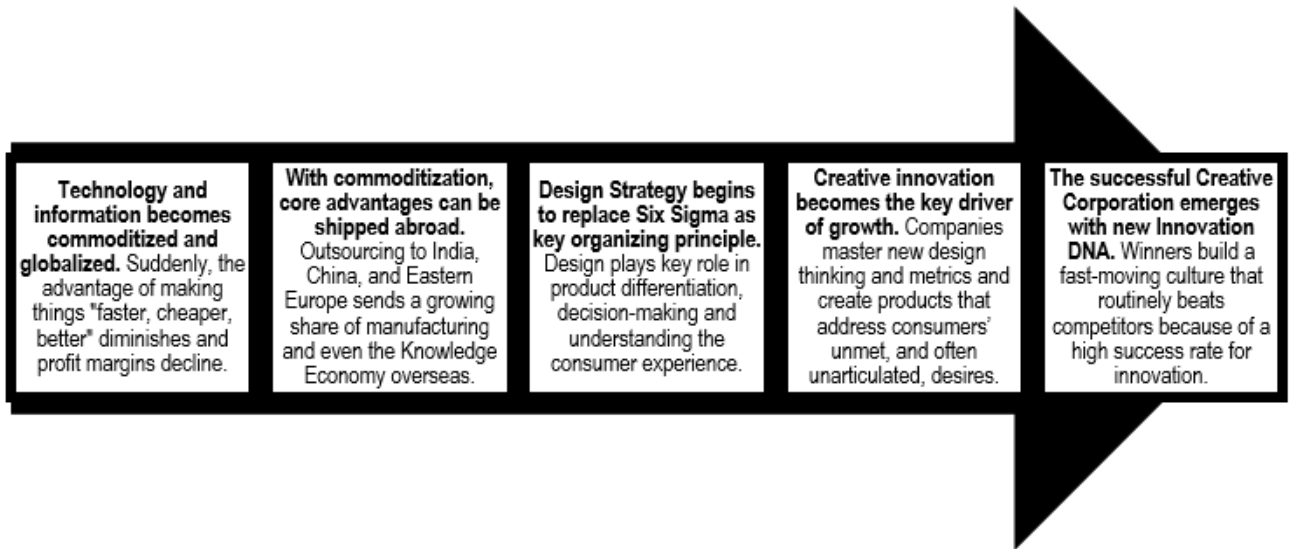


Figure 5: The evolution of the Creative Company (Nussbaum, 2005)

The strategic use of design requires that the organization has a design mindset. Earlier, the maturity model of Danish design latter was presented (Ramlau, 2004). The fourth step of the latter relates to the creative company, as it uses design at strategic level. Thus, the mindset of the company is crucial in establishing design as the strategic core component. One factor or a tool has been acknowledged to be superior in creating the design mindset; design thinking. Fraser (2007) argues that besides creating material and immaterial benefits for the company, the biggest value design actually brings is employing design thinking and design methods in strategy formulation and other business actions, thus "designing the sustainable competitive advantage of an enterprise" (Fraser, 2007, 67). Therefore, this thesis presents design thinking as one of the most important factors enabling the strategic use of design.

2.3.1 Design thinking

According to Liedtka and Ogilvie (2012), to practice design thinking is "to borrow some of the tools designers use to develop a deeper understanding of their customers' needs, and use those tools to help managers create better value for their customers" (Liedtka & Ogilvie, 2012). In design management practices, the concept of design thinking has emerged in the recent decade. At IDEO website, design thinking is described, by the creator of the term Tim

Brown, as “a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success.” (Brown, 2015). Design thinking draws from the multidisciplinary approach by combining the designer insights and methods with engineering expertise and turning the combined knowledge into products and services that meet the customer needs and market opportunities, simultaneously creating value in radically new ways (Brown, 2008; Borja de Mozota, 2006).

In design thinking Brown (2008) sees design's role as strategic and thus aligned with the current trends in research and practice of design management (Borja de Mozota, 2006; Bruce & Bessant, 2002; Olson et al., 1998). Borja de Mozota (2006) recognizes that design thinking is the key to understand the challenges that design management is currently meeting such as complex business prospects, human-centered approaches and acknowledging corporate social responsibilities. Using design thinking allows looking at these problems from a fresh perspective without biases and prejudices (Gloppen, 2009). Therefore, design thinking renews and creates new perspectives for problem-solving approaches.

Creativity is a core capability needed in designing novel solutions for customer problems (Brown, 2008). It is still seen as something mystical; creativity is an ability or feature of a creative person who has a wild imagination and who creates new ideas from a clear mind, just to produce them into brilliant outputs of art (Brown, 2008; Olson et al., 1998). However, the reality is different and much more complex, yet accessible for all. Creative ideas for design do not appear in a vacuum, but more often than not, design is a collaborative, reiterative process of developing, testing and refining output for the discoveries of customer needs (Brown, 2008). The creative design process consists of team activities and involves multiple other professionals besides designers (Barngrover, 2005). Design process is a way to implement design thinking into the organizational practices.

Brown (2008) presents the design process as a ‘system of spaces’ which each have a different set of activities connected to them. When these activities are matched in the process, it moves on creating new forms of value. These spaces are ‘inspiration’, ‘ideation’ and ‘implementation’ (Brown, 2008). They relate to many models used to explain innovation, strategy or other development processes, such as defining customer needs, developing an output, and entering

it to market (Rothwell, 1994). However, Brown (2008) widens the traditional definitions of the design processes stages. He explains that the first space is inspiration, since the driving force to develop something new can come equally from proactive problem solving, as well as reactively from recognizing a market opportunity. Ideation is a crucial part that is the most iterative of the phases with constant prototyping and testing ideas as they are generated. Finally, implementation phase deals with planning and providing a smooth route to market for the output of the process. The iterative design process never follows the same steps or sequences; instead it is constantly changing even during one project. (Brown, 2008) Iteration is a characteristic of both design and design thinking.

Understanding that design thinking is not a one-off quick fix, but a holistic and continuous approach to create competitive advantage, is crucial for an organization (Fraser, 2007). Liedtka and Ogilvie (2012) have established a model for implementing design thinking in organizations that are not initially design intensive. It involves four questions; what is, what if, what wows, and what works? The first question, what is, concerns the foundation for design ideas; the previous experiences and the resources allocated to design. The second question, what if, is about creating design visions and targets by envisioning future possibilities rather than following the past behavior. The third question, what wows, concerns the attractiveness of the design offering for the customer. The fourth question, what works, is about prototyping and testing what concepts are viable. (Liedtka & Ogilvie, 2012)

This approach is not as iterative and flexible as Brown's (2008) description of design thinking, but Liedtka and Ogilvie (2012) argue that it is appropriate for the crowd they are targeting. To utilize design thinking, organizations need to establish new sets of skills, since people who do not have experience or education in design do not have tools to encounter the ambiguous and unpredictable world of design. Additionally the approaches should complement both design thinking and the previous structured tools. (Liedtka & Ogilvie, 2012)

2.4 Research framework

The framework of this thesis is formulated according to the structure and findings of the literature review (figure 6). It highlights three connections of design and strategy: design strategy, design management, and design mindset. Design strategy is the obvious connection of design and strategy, and it is used by organizations that have recognized the importance of design as a core component in strategic decision-making. Design strategies are strategies for the development and production of saleable products, the creation and communication of corporate identity, and the design of the company’s environments. Design management facilitates the strategic use of design in organizations by guiding and resourcing the work of the people in the design function. In turn, design mindset is about creating the right atmosphere and culture that enhances design’s possibilities to spread through the organization. These three occurrences where design and strategy intertwine are the ones that have the biggest effect on creating a design intensive organization. The framework is not presenting causality or order of importance between the factors, but merely the aspects that design intensive organizations have in their operations.

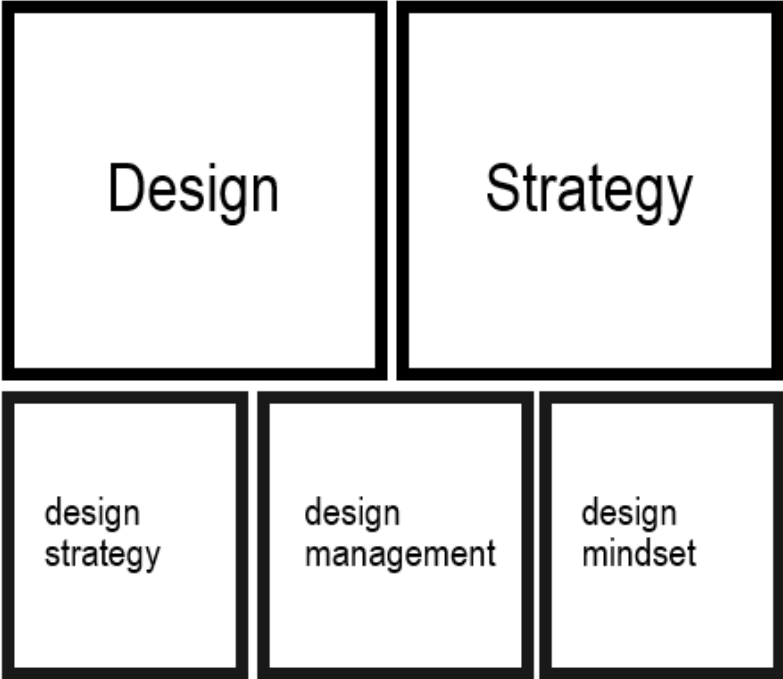


Figure 6: Research framework

3 RESEARCH DESIGN AND METHODOLOGY

Research design maps out each stage of the research process, from the selection of a topic to data analysis. It is a thorough plan that explains the research question and viewpoints of the thesis, the theoretical position of the topic, and the data collection methods, measurements, analysis, and writing processes. (Eriksson & Kovalainen, 2008) In research design, decisions have to be made in three levels. The broadest level decision considers the option of choosing whether to do a quantitative or a qualitative study. The next level decision deliberates on the actual design of the study, for example is the research based on case studies, correlation or experimentation. The third level decision reflects on the data collection method; choosing for instance survey or interviews as the source of data. (Brewerton & Millward, 2001).

To ensure that the coherence and logical nature of the data collection and analysis process are made explicit to readers, this chapter will introduce the research design and methodology. In the beginning of the chapter, the research approach and the philosophical perspective are introduced. After this, the selected the research method is described, and the reasons behind the decision discussed. Then the chapter will continue by presenting the research context and participant selection process. The chapter will conclude by explaining the data collection and analysis methods.

3.1 Research approach

Even though quantitative methods cover the majority of business research (Eriksson & Kovalainen, 2008), the topic of this research lead to choosing a qualitative research approach. The thesis is interested in opinions and perspectives of design experts about the strategic use of design. It relates to understanding reality as socially constructed and interpreted and thus, describes in exact manner most of the qualitative research approaches (Eriksson & Kovalainen, 2008). With qualitative approaches, the phenomena can be interpreted and understood in their natural occurring places rather than at pre-decided situations (Kvale, 2007). By nature, the results of this qualitative research are context and culture bound. Nevertheless, they offer a comprehensive portrayal of the studied phenomenon (Eriksson & Kovalainen, 2008).

Some features of this thesis imply that it could be considered as critical research. This is caused by the disposition of the data collection and analysis; the information collected with qualitative means is interpreted and understood from the researcher's point of view. All science research includes features that are needed in critical research; analytical inspection, defining research gaps and identifying research questions. However, this type of research scrutiny does not necessarily conclude as critical research. Additionally, in critical research the empirical data gathering and analysis are strongly guided by the theoretical viewpoints. The analysis of data occurs already during the data collection phase. (Eriksson & Kovalainen 2008) The research process presented above is not as strongly related to the iterative quality of this thesis project. Therefore, I will not present the thesis purely as a critical research, but critical perspective is still guiding the philosophical positioning.

3.1.1 Research philosophy

The philosophical position of the research is critical realism. This philosophical view recognizes that an observable world exist regardless of the human consciousness. Simultaneously, it sees that the knowledge of the world is always interpreted and socially constructed. Critical realism acknowledges that multiple understandings of reality exist and as researchers, we can make sense of these understandings with rigorous data collection. Qualitative study by nature does not aim for objective truth, but is rather subjective and interpretative. However, critical realism is concerned with understanding the structures of the world over the different constructions of the reality. (Eriksson & Kovalainen 2008)

Critical realism is rather usual for qualitative research that studies organizations, their processes and managerial practices (Eriksson & Kovalainen, 2008). It applies as a philosophical view for this research, because it understands the context and culture bound character of the perspectives presented in the empirical research. Furthermore, the viewpoints of the interviewees are interpreted against the structures of the observable world.

3.2 Research method

The initial idea for the research method was to do multiple case studies. However, as the research questions were formulated, I realized that case study method is not sufficient to answer them. Case studies examine certain people, organizations and subjects in a particular time and place (Hays, 2004). While being practical and particular for a single research subject, such as an organization, case study approach can drift to a pitfall of being normative and thus, scientifically not as valid (Eriksson & Kovalainen, 2008). To avoid this pitfall and gain more holistic illustration about the design field, I decided to gather an expert dataset. In order to perceive and connect all the different nuances of the design experts' statements, a thematic analysis method was chosen. Consequently, the research was conducted as thematic interviews with design experts from different industries.

Thematic interviewing and analysis are research methods that are used to create structure, identify patterns, and organize themes within qualitative data (Braun & Clarke, 2006). This research method is used to find the tacit meanings of data and to underpin the main subjects as themes by allowing the data to lead the analysis (Joffe, 2011). Therefore, thematic analysis is a flexible and empirically driven research tool that offers rich and detailed analysis of data. Several decisions should be considered prior to data collection. These concern choices about what is counted as a theme, focusing on single or multiple themes, analyzing the data inductively or theoretically, identifying the themes, and pinpointing the epistemology of the research. (Braun & Clarke, 2006)

I explicitly went through these decisions before doing the empirical research. For the interviews, I created four main themes according to the points that had risen in the academic research: 1. Definitions and connections of design and strategy, 2. The state of design and strategy in Finland, 3. Design strategy work; what it is and what it should be, and 4. Design management. Generally, I decided that a repetitive topic creates a theme. Since my goal was to introduce multiple perspectives for the strategic use in Finland, the second decision was to focus on several themes, which are closely connected to each other. While I based my themes to the repetitions occurring in the interviews, it was natural that I decided to analyze the data inductively. Hence, the themes are more data-driven than theory-driven (Braun & Clarke, 2006; Joffe, 2011). Furthermore, the themes were identified and created based on the actual

sayings of the interviewees' and not by interpreting the underlying ideas (Braun & Clarke, 2006). The epistemological view for the analysis was selected to be essentialist/realist, because it relates with the philosophical position of critical realism (Braun & Clarke, 2006; Eriksson & Kovalainen, 2008). The essentialist/realist viewpoint is concerned with unique understandings and experiences of the research subjects, which are significant parts of this research (Braun & Clarke, 2006).

3.2.1 Primary data

The primary source of data for this research is semi-structured interviews. Semi-structured interviews have a prior declared theme and a topic, but the structure of the interview and the wording of the questions can vary from one interview to another (Eriksson & Kovalainen, 2008). Using semi-structured interviews creates form for the interview situation and facilitates the collection and analysis process, but also allows freedom to follow the interviewee's train of thought (Brewerton & Millward, 2001). Doing qualitative interviews is a delicate matter. The researcher must be aware of not asking leading questions that offer an answer that servers the researchers' opinion (Eriksson & Kovalainen, 2008). In addition, using semi-structured questions can steer the interviewee's attention aside the topic, thus the validity of the research deteriorates (Brewerton & Millward, 2001). In this interview method, the researcher should be prepared to ask additional questions in order to reach more in-depth answers. The answers to the interview questions will provide data to be thoroughly analyzed, and after that, they answer the research question. (Eriksson & Kovalainen, 2008)

3.2.2 Secondary data

The secondary data is somewhat minimum in the empirical research. I was planning to gather additional data to support the interview results by studying the annual reports and written business and design strategies of the interviewee participant's organizations. However, two factors restricted the secondary data to consist solely of the information found on the internet. The first matter is that, the participants were interviewed primarily as experts in the design field and not as representatives of certain companies. Thus, the information about the

companies' operations is rather irrelevant. Secondly, since design strategies are rarely written down, I was not able to study them explicitly. To gain perspective and evidence to support the interviews, I benchmarked some known-to-be design intensive actors, to see how they talk about design in their websites and social media.

3.3 Research context

This thesis explores whether and how design is used strategically in Finnish companies. The empirical research consists of expert interviews in the field of design. The general context, Finnish companies, include some companies that are not traditionally seen as design intensive, and others that have design as their main business function. The context was selected to gather a comprehensive picture of the state of strategic design in Finland. The immediate context is the design experts. Using design as a strategic function in organizations is a rather new subject (Cooper et al., 2003) both in the Finnish and global context. Thus, having multiple perspectives from diverse industries provides nuanced representations of facts and opinions.

3.3.1 Participant selection criteria

Purposive sampling technique was used to select the research participants. In purposive sampling, the researcher deliberates on what kind of information is needed in the study, and selects criteria describing the participants who are prepared and keen to offer the required data. The selection is based on the qualities of the interviewees, without regard to theories or a prior decided number of participants. (Tongco, 2007)

The criteria for this research included that the participants should have experience in the design field. The goal was to find interviewees who could offer a personal example of using design strategically in organizations. To some degree, this was guided by the organizations where the participants work. It goes without saying that you cannot study something that does not exist. In the discussions, prior to the thesis project, I learned that design strategies are still very rare in Finnish companies, since the strategic use of design is such a new thing.

Therefore, traditional organizations with no prior relation with design were excluded from the empirical study. This also delimited the small actors in the design field outside the selection criteria.

To collect varied perspectives, the design experts were selected from different industries. In addition, to keep the empirical data sufficient for a master’s thesis, four industries were selected. The criterion was to include experts who have experience from both B2C and B2B fields. Additionally, to involve a truly design intensive viewpoint, couple of representatives of design agencies were selected. The selection of industries was made prior to the research and is presented in table 1.

Table 1: Researched industries

Industry	Participants
B2C, producing consumer goods	1
B2B, producing customized goods for businesses	2
Design consultancy	2
Other design intensive organization	1

3.3.2 Selection of interviewees

The number of the participants was not decided beforehand, but the industries were. This regulated the number of perspectives needed from each industry. A qualitative master’s thesis is said to be extensive enough when the amount of interviews is between five and ten. Consequently, when I interviewed one or two participants from each industry, I reached enough perspectives and saturation of the topic started to appear. The saturation point occurs when enough information has been collected and the data starts repeating itself (Bowen,

2008). In this research, the stories of each interviewee started following the same path; offering repeating evidence of factual events. Thus, the empirical research ended when the saturation point was reached.

In total, six design experts participated in the interviews. The interviewees represent different positions and backgrounds, which brings perspective to the research (Eriksson & Kovalainen, 2008). In the personal level, the participants had some diversity. Two of the interviewees were male and four female, thus the sexes were quite equally presented in the thesis. The age of the interviewees ranged from around 30 to 50 years. Most of the interviewees have a managerial position in their organizations. Three participants have a degree in arts and design and the other three have their education in business. Having people from both business and design backgrounds created difference and tension between the statements, but also introduced the needed perspective. The interview participants and corresponding industries are presented in table 2. I decided to use pseudonyms of the interviewees, with the intention of not personifying the statements.

Table 2: Interview participants

Interviewee	Position	Company
Interviewee A	Design planner	Design agency
Interviewee B	Industrial designer	Electrical manufacturer
Interviewee C	CEO	Promotional organization for Finnish design
Interviewee D	Head of strategy and service design	Design agency
Interviewee E	Manager, Industrial design and User experience	Electrical manufacturer
Interviewee F	Director, Consumer insights	Consumer goods manufacturer

3.4 Data collection and analysis

3.4.1 Interview design

The empirical data was collected during two months' time. The interviews were conducted face-to-face with all the participants in the premises of their organizations. In each situation, the interview language was Finnish, since all the participants are Finnish. The choice of language created one particular problem; what is the right term for design in Finnish? While it is acknowledged that design, as a term, is too generic to be describing the whole area, the interviewees agreed that it is still better than the Finnish word "muotoilu" (directly translated as formatting), since it does not direct the focus only on the form. In general, "design" is used in a wider sense than "muotoilu" and thus, was used in the interviews, even though they were conducted in Finnish.

All the interviews were recorded, and additional notes were made throughout the interviews. The sessions lasted from 45 minutes up to 1.5 hours. The interviews were fully transcribed word-to-word, to retain the actual meaning of the words and to recall the main points of the interviews (Braun & Clarke, 2006). The transcribing of the interviews was conducted right after each interview, and thus, the first phase of analysis was done simultaneously with the data collection. The transcription process connected the interpretations of the interviewer with the authentic words of the interviewee (Kvale, 2007).

The actual interview situation followed the instructions of Kvale (2007). In the beginning, I set the interview stage by briefing the interviewee about the study and asked for the interviewee's consent to record the session. After this, the interview was conducted, and in the end, the interviewer debriefed and concluded the interview. (Kvale, 2007) The interview questions were formulated according to the philosophical positioning of the research as realist questions; they were interested of the facts about what happened and how were things done in the organizations (Eriksson & Kovalainen, 2008). Main questions followed the research themes and were, for example "Can you tell me about the role design has in your organization?" and "What kind of practices are included in design strategy work?" The questions that are closely linked to the topic tend to spring up the conversation (Kvale, 2007). More detailed questions such as "Could you tell more about this situation?" were used as follow up questions. In order not to be leading the interviewee (Eriksson & Kovalainen, 2008)

questions like “Who are the people that engage in design strategies?” were asked only if the interviewee had told that the company has a design strategy. The interview frame and questions can be found in the Appendix 1.

3.4.2 Interview analysis

Thematic analysis was chosen as the research analysis method, prior the actual data collection. Considering the analysis method prepares the researcher to analyze the data as it occurs in the interview (Kvale, 2007) and guides the decisions that have to be made before, during, and after the interviews (Braun & Clarke, 2006). Analyzing qualitative data can be somewhat complicated since it covers intangible events and phenomena (Gibson & Brown, 2009). In order to simplify the complexity of the data, in this research the data was transcribed, organized, and analyzed manually.

Thematic analysis is a data driven research method in which the thematizing is guided by the findings of the empirical data, not a pre-existing frame of codes. Therefore, it was crucial to be continuously perceptive for the uprising and repetitious topics already during transcribing the interviews. After transcribing, the data was read through thoroughly and analyzed by meaning and interpretation. At this point, the recurring topics started to unfold from the text. The same matters were discussed in every interview, so the recognizing of themes was quite straightforward. The repetitious topics created the initial codes, the most basic elements of the data, some of which were already familiar from the academic research. The next phase was to define the themes of the research. Some of the initial codes were so similar to each other that they were connected. Consequently, the initial codes were organized under 22 themes. Some themes were more specific, while others were wider in their contents. The themes had distinctive topics, but also some elements that were overlapping with other topics. For example, the theme of design management had parts that talked about design agents and design thinking. The themes included, among others, benefits of using design strategically, design strategy, and the value creation process of strategic design. The themes are listed in the Appendix 2. (Braun & Clarke, 2006)

When the first phase of thematizing was completed, the themes were reviewed and the data was restructured around the most important themes in a logical order that connected the different interviews (Braun & Clarke, 2006). Besides the connections of design and strategy, three themes were chosen as the main topics representing the empirical data: customer focus, managerial support, and design mindset. Several other topics were placed under these main themes. This created the preliminary structure for the chapter where the results of the empirical research are presented. The data was rich in content and detail, and therefore, cuts had to be made to keep the empirical part consistent and concise. Hence, after a deliberate consideration some themes were left out of the thesis, since they were not relevant in terms of the research focus. Consequently, the data was transformed into briefer, more compact texts that were easier to handle (Kvale, 2007). The main themes were refined and structured into a coherent ensemble to represent the empirical research (Braun & Clarke, 2006). Then, the texts of the final themes were interpreted, analyzed, and written out. The statements of the interviewees' were compared against the other participants' sayings and the findings of the literature review. The results reflected each other quite well and there were relatively few contradictory statements. This simplified the analysis and created validity for the research. Finally, to enhance the vividness of the text, the best and most descriptive quotes were translated into English, and written out to the chapter concerning empirical research (Kvale, 2007).

3.5 Research process

What comes to the writing process of this thesis, it can be compared to a design process, since design methods were used in it. First, there was the initial recognition of need: I need to find a subject and write a thesis. The selection was to do research in the field of design and strategy. This was followed by reviewing literature that connected these two subjects. When I had some kind of understanding about the area, I was asked by one design expert to define the "what if", the outcome that I am looking and aiming for with the thesis. I decided on a direction and started reviewing literature about design strategies. However, at this point nothing was really finished and settled. It was more of an experiment of what could work and what could not. The whole process of writing the literature review, doing and analyzing the

interviews, and writing the results was an iterative one. The focus was narrowed down to the strategic use of design only when the empirical data was analyzed. Each stage shaped the previous ones and ultimately created the final outcome. When the parts of the prototypes started to come together, it was time to stop the iteration and finish with some aesthetic touches. This was a design process per definition.

3.5.1 Reliability and validity

The iterative quality of the thesis process, presented above, ensured the reliability and validity of the research. Every time a theme occurred from the data, it was compared to the findings of the literature review. In other words, it was made sure that the findings of the empirical research reflected the ones from the literature review and vice versa. Iteration and repetition were used in the interviews as well, when several questions about the same topic were asked in slightly different forms. The aim was to draw out the hidden opinions and to recognize a pattern of thinking, in order to create the themes that could be analysed. While creating repetition, this made sure that the results would be corresponding in case the research was done again under the same conditions. (Eriksson & Kovalainen, 2008).

The validity of the research was guaranteed with the selection of diverse interview participants from different industries. Additionally, the participants were experts in their field and had experience from varied organizations and positions. Therefore, the selection of interviewees made sure that the research presents a comprehensive viewpoint in the area of design and strategy. The holistic validity of the research is affected by the nature of qualitative research. It is always based on interpretations of the world, not scientific facts. Therefore, the truthfulness of the data can only be considered against previous knowledge. As said, in this research the comparison of the findings of academic and empirical research was done constantly during the research process. Therefore, throughout the analysis it was ensured that the results of the empirical research were valid in terms of preceding data. (Eriksson & Kovalainen, 2008)

4 THE STRATEGIC UTILIZATION OF DESIGN IN FINNISH COMPANIES

The connections of design and strategy are multiple. This chapter presents the interviewees' viewpoints of these connections, starting with their definitions of the concepts of design and strategy, and continuing with the initial focus of the thesis; design strategy. Next, the central factors about the strategic use of design are displayed. These factors were highlighted in the interviews. The first one is customer focus; realizing that customer needs are the driving force behind strategic design. The second factor is about design management and the managerial support needed to establish strategic design in companies. The third relates with design thinking and the change in the mindset that the use of strategic design brings to an organization. These factors include much more than what is usually visible in organizations, and this chapter will explain how they are incorporated from the perspectives of Finnish design experts.

4.1 The connections of design and strategy

4.1.1 Interviewees' perspectives of design and strategy

In the beginning of the interviews I asked the participants to define what design means to them. Albeit some of the interviewees had to think for a moment before they responded to the first question, the answers were precise and alike. There were some, like Interviewee C, who had the answer ready.

[Design is] simplifying. -- simplifying the offer in a way that the customer experiences the interaction with the company and their products easy. (Interviewee C)

The first two of the three factors connecting design and strategy, customer focus and design thinking, were raised to the conversation already in the beginning of the interviews, and included in the definitions of design. Adding to Interviewee C's opinion, two other participants say:

In our context, the word design has meant engineering design, but in the last year and a half, we have started discussing design in the sense that it is a customer and user centered approach. Then also, the term design thinking has been introduced, and described in a way that it is seen outside the engineering field, which means that there is always the customer, the user, who is a starting point for design. (Interviewee E)

...it [design] is everything that happens between a person, a customer, and a product or a service. It is actually all the things that a person interacts with. (Interviewee D)

In this sense, design concerns everything that a company offers to a customer and thus, is applicable for all industries. Interviewee F includes that “design is the planning of the whole customer journey”, the comprehensible lifecycle of a product or service. Design is about the process not just the end product, and it is also linked to renewal and innovation activities.

In fact, I see that it [design] is a certain way of doing things, which produces a final outcome that, perhaps better than usually, takes into account the customer and understands the cultural and aesthetic point of views, then builds it somehow smartly into the overall solution. But perhaps the characteristic way of thinking for our company is that we design a holistic customer experience. (Interviewee A)

These views relate strongly to the notions presented in the academic literature on the topic. Design is clearly seen as something that enhances organizations’ capabilities to be successful in businesses and attractive to customers. However, although the first question only covered design as a subject, the interviewees tended to include strategy in their responses, particularly strategic design and design strategies. It was as if these two terms were inseparable. This drew my interest to ponder whether this is really how the matter should be considered: design is the term for the outcome and strategic design is all the actions behind the outcome.

Interviewee A justifies bringing strategy to the discussion by saying that “design is a means to achieve a strategy, per se”. They are interconnected in organizations that are aware of the potential advantages brought to a company when design is used design strategically.

Strategy is where the future of the organization is designed. (Interviewee F)

Interviewee F’s view about strategy displays the reason why design and strategy are inseparable. Strategy is design, but then again when the definition of design is so wide, what is considered not design? However, as it was found in the literature review, strategy has a universal definition of being the organization’s long-term plan that incorporates the company’s mission, vision, and values, and gives direction for all business ventures. The interviewees’ views about strategy do not differ much from the common description of strategy.

I see that a company has some sort of intent of the future and a strategy is then the plan how to get there, and it includes the main operations of the company; how the company should act to reach their goals. And the timespan and means vary a lot depending on the company. (Interviewee A)

It [strategy] is about creating the bigger picture, onto which you can base all your smaller decisions. (Interviewee D)

Well, the strategy is our vision or intent of what we are aiming for. -- We have certain visions for growth and partly for the culture of how we operate. Thus, the strategy is kind of a statement or crystallization of these. (Interviewee E)

Every company has a state of will towards which they are striving. In this equation, strategy is the way to get there. It is a compact statement of what should be, and how to reach the vision. From a process perspective, strategy relates to design in the sense that it is the design of the process through which the business is moving. Interviewee C claims: "Strategy is about defining your core competences". How I understand this is that a company finds out what they do best now, and then they make a plan to improve their abilities in their core competence. The process of coming better at your core competence is the strategy process.

The search for the proper conception of design. The key issue in understanding and using design, in other than design intensive organizations and situations, is that the word design by itself seems not to be enough to express the whole area. I have faced this problem multiple times during my studies and this thesis process. People tend to add other words with design, i.e. service design, customer focused design, interface design, graphic design, to make it understandable and defined. However, by using additional terms they exclude all the other aspects of design. Differentiating these terms from each other, while they were used as synonyms, created difficulties in the analysis of the interviews. Simultaneously the same word was used to mean different things. I have begun to think that there is no one right term for the subject; it might be always context bound.

The interviewees have recognized the same issue. Interviewee F says that people and organizations are moving away from using a single term to define design and starting to use more specific and descriptive words when talking about design.

So, it is somewhat like, if you go out to the pub in England, and you order a beer... it is the same thing with design today, it is too generic a term. (Interviewee F)

Interviewee E claims that using terms that are more specific would facilitate communication in organizations by creating common ground and shared understanding about design. Interviewee F further explains that people tend to look at things from their own point of view.

...it is such a common word that people easily make their own interpretations of it – – one would think of it [design] from service design point of view, one from engineering angle, one purely from product design perspective and one would think from the perspective of corporate structures or organizational planning. (Interviewee F)

Thus, using generic terms confuses the communication in organizations and hinders the effect that strategic design might have, if people were talking about the same thing. Still, Interviewee E adds that it does not really matter how the term is defined as long as, it is consistent and done so that it benefits the organization with its ambitions.

Especially two terms that are granted connections of design and strategy, strategic design and design strategy, are often used as synonyms and it is quite hard to detect which one is the right term to use in which situation. I asked the interviewees to explain the difference between these terms, but they found it to be a difficult task. One thing that the interviewees agree on is that it does not matter whether you do strategic design or have a design strategy, because both of them are always crosscutting all the functions in the organization. The multidisciplinary role of design is what makes it important. Interviewee F expresses that there can also be two types of strategic design.

Well, this too, is a word used in two ways. Either by saying about existing products, that this is our strategic design, this product or offering has a specific role in the portfolio. – – or then there is the second meaning, which is that certain direction is pursued with it [strategic design]. It means doing something completely new, the kind of activity that aims to renew the company radically. It aims to create a strategy for the future or to bring it into practice. These two always go haywire in companies. (Interviewee F)

Interviewee E tells that in their organization the word strategic design is not commonly used. What comes to design strategy, it is not so much about the strategic features of the portfolio, than a strategy of the design function. Interviewee C suggests that the difference might be

visible if it is examined whether companies are doing design for strategy or strategy for design. This differs from a company to another and therefore not every company uses both strategic design and design strategies. Overall, generally these two are mixed in organizations, even though they have clear and distinctive definitions as explained in the introduction chapter.

4.1.2 Design strategy

There can be several strategies in an organization, and these strategies have a hierarchy, starting from the overall business strategy and coming down to function strategies. Each level strategy should be transparently drawn from the previous one or otherwise it creates complexity to the one thing that should indicate the direction clearly. A design strategy can be one of these function strategies in an organization. However, as stated in the literature review, design strategies have as many forms as they have makers and users. According to Interviewee F, to start with, all strategies have common elements and the thing that separates them is the way they are used, i.e. the direction of the strategy. Design strategy directs the actions and the outputs of the design function. Some design strategies strive for creating volumes of products and revenue, others aim to establish iconic design and brands, and therefore creating cultural value is their ultimate goal.

If design strategy is used as the function strategy, it usually follows the basic principles of any strategy, listed defined in the introduction chapter. Interviewee B sees design strategy through the lenses of a general strategy:

...strategy provides, a design strategy specifically, a certain kind of goal orientation for the activities and it brings coherence and consistency, efficiency as well. Otherwise, they [the R&D projects] are individual projects without much purpose. And they may well produce individual victories, but if you do not think further it can, in the worst case, cannibalize any other products [of the product portfolio]... (Interviewee B)

Because of the crosscutting quality of design, a design strategy can be seen as a wider entirety acting as the channel for bringing strategic design to the organization.

...design strategy is then the design means, which are seen as key to achieve the target, thus, some kind of a systematic plan for the utilization of design. It includes for example processes and specifications of product portfolios in respect of how they should be developed in order to achieve the future intent. I see that this concerns with the understanding about design having something to do with achieving the future vision.
(Interviewee A)

Interviewee C says that design strategy actually connects all the other core competences, like quality management and marketing, by being crosscutting in organizations. He continues by claiming that design strategy is not necessarily explicitly written as a separate strategy. Nonetheless, he says that if your core competence is design and it is acknowledged and outlined in the strategy, it already makes a design strategy. Interviewee C again raises the customer focus to the discussion.

...and then design strategy again cuts across them [other functions] and displays the manner in which you get your goods to meet the right person, in the right way and on their terms. Most often when firms do not use design methods, they are thinking about how things would work so that it is most effective for them to deliver the product; we have such a good product that as long as we obtain it on the shelf, then it will definitely sell from there. (Interviewee C)

Interviewee D says that strategies can be on several different levels. For example, a design strategy can be derived from the societal level: how important design is in a society, how much there is investment towards it and how is it developed. In turn, Interviewee B explain the design strategy of their company by more micro level stages. She refers to the model of the

levels of design management, presented earlier in this thesis, and which is familiar from the academic literature of design strategies. Forming a design strategy is a current project in the organization and thus, Interviewee B was able to specify what design strategy really means for her as a design professional, and for their company.

For long, we have seen design strategy as three leveled. The first is the higher strategic level, which in my opinion is the vision: where do we see the company in ten years. It includes the company's vision and the means to produce products and services accordingly. Then there is the tactical level, which includes our self-defined processes, according to which we operate. They may be guidelines for design and instructions in general, or displaying a process that has been defined and should be repeated in the same manner time after time. It brings a certain kind of consistency, so that we never lose the goal of our operations. Then, the third is the operational level, which is the product and the individual R&D processes, which are done from beginning to end.
(Interviewee B)

What comes to different kinds of design strategies the interviewees consider design strategy to have multiple forms: strategy of portfolio, design DNA, or a collection of design guidelines and methods. Interviewee D reflects that not often companies have a single design strategy, it is usually rather fragmented. However, Interviewee F sees that the above mentioned strategies are separate strategies that should complement each other, and be used closely together. The difference between the opinions stated here is that some interviewees see these strategies as an entirety and other as separate, but connected strategies. Interviewee F perceives a design strategy as the longer term vision of what the company is doing, whereas for example a portfolio strategy presents the same, but on a shorter term. This separation allows the different strategies to have diverse visions and goals that are varied in character and duration.

4.1.3 Design strategy work

While the overall design strategy might be abstract and longer term in its visions, it can be argued that the other fragments of the strategy might be more tactical in nature. This results in design strategy being more strategy in practice than it is a plan without real actions. The practice perspective on design brings it closer to strategy work. Design strategy work includes all the actions that are done in formulating and implementing design strategies. In addition, when the importance of design as a strategic component is communicated and promoted to the organization it can be seen as design strategy work.

To make a design strategy more of a hands-on-practice, the factor that matters the most is that the right people are involved in the strategy work process. Interviewee D explains that employees can have different motivations than the company, e.g. in terms of what comes to the daily work, and it is important to understand all the ambitions before the strategy formulation starts. Thus, it is crucial to know and find the right people.

...hopefully there [in the strategy work] will be the owner of the company, if you talk about a bit smaller companies that is when things tend to jolt forward. There is often product managers, and brand and design managers, such people. There should be sales, production and customer insight. But all firms do this quite differently. – – But too often, this is done so that we have some internal event in the company and then a “paper” is distributed for everyone and that is it. (Interviewee D)

The situation that Interviewee D describes is common in organizations. Without the right support and wide enough spread of people participating to the strategy process, it can be superficial and forgotten fast. Interviewee C reminds that the design strategy work cannot be done in silos; it requires a multidisciplinary team to create the design spirit in it. Interviewee B tells that she aims to involve those people in the strategy formulation process, who are actually going to use the design strategy. This gives them ownership over the cause and makes design strategy work part of the daily actions.

Interviewee E argues that the design strategy work that they do in their business unit does not really differ from the general strategy work guidelines.

Well, since this is the strategy of a function, this design strategy, I do not see that it is different from any strategy work. I think it is quite clear; having the basic strategy guidelines and general understanding of the bigger picture, trends and needs. There should be clearly stated what we want. We have some kind of vision of what we aim for and then objectives and parameters are created accordingly. Nothing revolutionary in my opinion. (Interviewee E)

Interviewee A agrees with Interviewee E in the sense of design strategy work not being much different than any other strategy work; the basis is to gather knowledge about the company and to understand its business environment. Interviewee D argues that the biggest distinction between design strategy work and business strategy work is that the latter has usually undefined amount of data behind it whereas the previous one generally is created from zero amount of historical data. However, Interviewee A is not worried about getting enough data. She explains that what makes the difference are the tools and methods used in the design strategy formation, which help to prototype the strategy as a practice in sort of “research through design” way.

In part, we are doing the same things [as management consultants], for example outlining the portfolio models or product concepts... let's say that we are trying to outdo competitors, with these features, then we start to design the strategy into reality, and to see if there is the capability to accomplish certain things. It is this kind of research through design way of work. We may have more concrete tools for this than some of the management consultants have. We have different approaches. (Interviewee A)

The design strategy work presented here may be interpreted as a design process itself; the research is done with design methods and the actual outcomes are tested before the strategy is completely formulated. Thus, can be argued that design strategy work with its tools and methods is somewhat different from the traditional strategy formulation, which follows more strict guidelines and uses tools that are more conventional.

Design strategies and thus design strategy work is still quite a new thing in Finland. The interviewees do not yet have extensive experience with these strategies, since the ones that they have been doing are the first ones in the companies. Therefore, the actual practices that benefit design strategy work are not fully established. Consequently, the firms that are starting to understand the importance of the strategic use of design do not have knowledge about design strategies. This is also demonstrated in the way Interviewee D talks about design strategy work that he does for his client companies. Interviewee D tells that, as a design entrepreneur, he does not straight away offer a design strategy, but tries to help the client to see the bigger picture of where the world is going, where their business is going and how one product or service is linked to all of this. At some point when the client company understands the importance of strategic design and the methods behind it, they may want to control things themselves. This creates the basis for the design strategy work, even though it is not explicitly displayed as such.

The importance of having a design strategy. While I was interviewing the design experts, I began to wonder whether design strategies are useful and suitable for the purposes they are done for. In the first three interviews, I did not explicitly ask if a design strategy is a good way for bringing strategic design methods to a company, but in these interviews, it was said between the lines, that there might be more appropriate ways to do this.

...it is a state of mind. The fact that it [design strategy] is written down, then is not terribly important. If design is used at a strategic level, then I do not know about how many companies really write it down... (Interviewee C)

As said earlier, the interviewees had quite different ideas of what a design strategy is, but all of them still said that design strategies are needed in some form. According to interviewee E, a design strategy is not what makes an organization design intensive it is the design mindset and the people who create it. Design strategy is merely a facilitating tool. Interviewee B believes that workshops and forums are good methods to implement a design strategy into practice and create enhance design intensity. She also speaks about creative design environments that could benefit design and innovation work by making them more approachable. Visualizing the design strategy in one way or the other will bring it closer to the daily work and to the reach of other professionals. Interviewee A explains that writing down design strategies is more of a habit learned from the general practice of strategy, than it is a recommended procedure. In itself, a design strategy does not create added value.

There is no sense in creating fancy manuals, if no one follows their guidelines.
(Interviewee D)

Nonetheless, Interviewee D says that having a written down design strategy can make the daily work easier. He explains that the goals and visions have to be displayed somehow in order to follow, continue and develop them. Interviewee D adds that strategy work is worth nothing, if it is not implemented in the organization, and sometimes the state of mind does not arise without a little stimulation. Interviewee B and Interviewee F acknowledges the importance of a written down design strategy, since instructions and parameters need to be set in order to create for example coherent product portfolios.

4.2 Characteristics of a design intensive organization

The importance of knowing your customer and understanding their needs, in order to use design strategically has been acknowledged already in this thesis. This chapter will explain more thoroughly, why this is crucial for businesses regardless of whether they operate in the

business-to-consumer (B2C) field and or in business-to-business (B2B) industry. Additionally, it will discuss the benefits of using design strategically, for a company.

4.2.1 Customer focus as the key indicator of the strategic use of design

In the interviews, one thing that was mentioned several times by each participant was the importance of customer focus in the strategic use of design. The interviewees used the concept in different contexts, but always highlighted it as the most important feature of a design intensive organization. Therefore, there was a clear tendency to think as Interviewee D claims:

As a [design] professional, it is easy to see if the company has paid attention to a wide range of different things. The service experience, the products, the product stories and all the [customer] touchpoints are well thought. Often then, you can see that the company has invested in the issue, and thought about it via a customer perspective.
(Interviewee D)

User orientation, customer focus, and consumer point of view are all terms used to describe the premise for design. In fact, organizations use these terms without even realizing that what they are really talking about is strategic design. The interviewees used these words as synonyms and mixed them as they pleased. To understand the realm between customer focused and non-costumer focused organization, Interviewee F and Interviewee E use the example of the difference between design and art. They describe that artists, in principle, do their work for themselves, when a designer generally designs for someone else – a customer.

...no object is designed just because... well art objects may sometimes be such that they are created, their ontology, is just to be. However, other objects, with the exception of

art and natural objects -- have a meaning and a value that is designed for a customer.
(Interviewee F)

I think the driving force in design is precisely the fact that we identify the need. We always have the customer, to whom we are trying to design, and then we interpret [the needs of our customers] also according to our artistic talents. But we don't do it... I do not do, for example these products that we do in here, for myself. By no means, I do not even belong to the target group. But I can empathize with them [customers] and try to decipher them through my profession. (Interviewee E)

Interviewee C advocates the same feature from a different, company's angle:

...ok, they don't have a design strategy or design thinking when they are only thinking about themselves and their process first, and don't think about how they could do things so that they are easy and convenient for the customer. (Interviewee C)

Interviewee D and Interviewee C tell that whether a company has the customer in their focus can be discovered for example by studying product portfolios and product languages, and annual reports that display the customer journey or the customer encounters. These discoveries reveal if the company uses design strategically. However, it is hard to detect the models and ways of work that are utilized. Thus, to recognize a truly design intensive organization the interest should be directed to what is happening in the fuzzy front-end and try to understand the procedures used and not used there. Do they relate with design? In other words, are the organizations pro-actively seeking answers for customer needs or reactively following the markets. Interviewee C explains that a design intensive organization is enlightened with the fact that design is an important competitive factor. Still, as an outsider it is very hard to identify a design intensive company, since the definitions and manifestations

are multiple. As Interviewee B says, “it goes from one end to the other” and there are no uniform features.

However, it is hard to say what are the concrete features that indicate [the strategic use of design]. In general, the entity [of the organization and its actions] oozes it.
(Interviewee D)

Interviewee E explains that design has been used in the operational level for decades now, but to create influence for design in the strategic level, the design methods and the customer point of view should be emphasized. The industries may not be mature for this now, but there is potential for growth.

The difference between B2B and B2C actors in the design field. On the contrary, Interviewee E wonders about the real design intensity of the organizations that are traditionally seen as design oriented, such as Marimekko or Fiskars in Finland. She explains her point by saying that in such B2C companies it is assumed that the customer is always in the center of the focus and this makes them already design intensive. Nevertheless, how well these assumptions correlate with the reality, should be researched. Interviewee A adds that, in B2C companies, it has been crucial to know what people are looking for in products and services, and in the recent decades, they have used strategic design methods in incorporating these insights into their processes. Therefore, they can be seen as the forerunners in using design strategically. For a B2B actor integrating the customer insights can be more challenging. Interviewee B explains that B2B firms need to think about both their customer and the end user. This creates problems when their interests are not harmonized, and compromises need to be done by using design methods.

...we are a B2B company, i.e. we need to please the buyer, then the installer and the end-user. – – the usability [of the product] arises from the fact that it is easy to install,

but it must also be easy to use. For example, a private home resident has very different preferences than the person who does the installing. If we only focus on the fact that it [the product] is pleasing the end-user, but is impossible to install; the installation lasts three times longer than the competitor products, then it will never reach its users. There is such a path. (Interviewee B)

Although globally the forerunners in using design strategically have been the B2C companies, Interviewee C says that in Finland the strategic users are mostly B2B organizations. Interviewee A suggest that this is because the pressure to use design strategically comes from the international competitors and the big B2B companies in Finland have recognized that they need to respond to the competition. Moreover, the smaller companies that are mostly B2C actors do not have the courage or the resources to start using design strategically. Nevertheless, Interviewee C adds that the reason why design is used strategically in B2B organizations rather than in B2C's has more to do with the fact that, in Finland the emphasis is in the B2B industries. Interviewee F also supports this, by noting that the use of design is not really different in B2B or B2C organizations, but the requirements for design might be.

Often it is so, that in the B2B field, depending of course on the size of the customer, the requirements can be very specific. – – And then if the product or service is made for a particular purpose, for example, to a professional use, then the requirements are often quite particular and precise. Actually, this is perhaps the only difference, which I think is quite conspicuous. When [the products and services] are made for a consumer, the requirements are often such that a wider range of people has to be considered. (Interviewee F)

4.2.2 The benefits of using design strategically

The benefits of using design strategically appear to be multiple. Interviewee A emphasizes the importance of the customer also here:

I see that the most important benefit is the adoption of customer focus and the turnaround of the perspective. So that, instead of considering actions from the company's own functions and competences, we should turn it to – – what could we do better to perform better in the customer's opinion. This is the main benefit that can be brought [to an organization], and can be incorporated at all levels. (Interviewee A)

Interviewee B explains that using design strategically does not only bring cost savings for the company, but also makes the R&D process more efficient and the work of the designers easier. From the customer point of view efficient R&D and new products benefit their lives by answering new needs with more sufficient products.

Good design is that you do one product, which makes ten other products redundant. (Interviewee B)

Interviewee C is convinced that investing in the strategic use of design will bring financial profits. Interviewee D argues that when design is used strategically it helps to concretize issues, which in turn makes the organization and its actions more transparent for the stakeholders. Interviewee E consecutively believes that using design strategically enhances quality, which the customer appreciates, and thus, quality brings money.

I can see that it brings quality. – – if we consider that quality is more than just the technical quality of the product, then yes it will bring quality for the customer experience. That is probably its offering. And there should be a little faith in it. You have to believe that it will actually turn into money that it is not daydreaming. (Interviewee E)

4.3 Managerial support for design

4.3.1 Design management

Design management is an important factor in using design strategically. It can be said that if there is no design management, there is no strategic design. The interviewees acknowledged managerial support as one of the most important facilitators of design. Thus, this section is addressed to the matter of design management.

Especially in design management, the multidisciplinary role of design is emphasized. Interviewee A explains this by saying and that the role of design is to be a horizontal support function for all the other functions, it does not have to be a separate silo. Overall, Interviewee B says that organizations are rather seen as networks than collection of silos. Interviewee D and Interviewee A add that a designer or a design consultant is the bridge that connects all the other professionals and functions together, even if the organization is very hierarchical.

A designer or design entrepreneur often has a role of trying to combine multiple things and trying to pull together [other silos] – – Even though the organizations have multiple silos, at least the design process should connect them together. – – It [the design function] probably is located in such a way that it goes horizontally through [the organization]. (Interviewee D)

As stated in the literature review, the design function can be separate or belong to another function. The interviewees were not totally unanimous about where the function can be situated. Interviewee A says that possibilities are countless, but in many companies they have worked with design is part of either R&D or marketing. More often companies that buy service design from an outside actor have the function under marketing and for production companies it is in R&D, adds Interviewee A. Interviewee C believes that in order to have actual strategic design it needs to be a separate function that is situated close to the top management. He explains:

Well, if design is in marketing, then maybe it will appear there in marketing. If it is in R&D, then it is industrial design and might be noticeable in the products, but it is not of necessarily visible as an input in the company's operations. (Interviewee C)

Interviewee C continues that the design function, if there is one, is usually quite small, not more than five people. Interviewee B and Interviewee E are consistent with this notion when they discuss that a design team, rather than a function perform operations in their organizations. There are few people working with design in their business units, but they are not actually connected to any other function. It can be argued that this creates space and freedom for the teams to truly work as the connector of disciplines in their organizational network.

There is no design department, but there is a design team and it is still very small. We will see how it evolves. And we have external designers who are located here as well. In general, the target for us designers, is to be integrated in all the work, so that there are no own projects [for design], but we go into the R&D projects. (Interviewee E)

Interviewee E argues that if a design team is too small the designer will not have enough time to do the actual design work from all the managing. She says that often design is considered too narrowly. This results in allocating work that requires diverse knowledge and skills for too few designers.

In my opinion, design should be seen as broadly as anything else is. For example when I am requesting resources for my team, I think that it is useful to show the structure of the team in the way that there is industrial design, and it has three main disciplines; service design, product design, and UI (user interface) design. And the latter includes both interaction designers and graphical user interface designers. So I really need four people, at least. Because they have such different skills. (Interviewee E)

The interviewees agree that design management is an upper level management practice. As defined earlier, design management gives guidelines for the work, controls the resources, and oversees design actions. In the best-case scenario, a design manager is part of the upper management or the board and thus, design is recognized as a core function. Interviewee A gives an example of KONE, where Anne Stenros has successfully led the company to use design strategically. According to Interviewee B, to make design management work, the upper level managers or owners need to have ownership over design, and they also need to have design mindset. Interviewee C continues from this by saying that the management level needs to be committed to design, so that they have actually thought about what they expect and want strategic design to accomplish in their company. This is the starting point for design management; defining goals. From there it goes down in the organization through strategy, or as the new culture, all the way to the operational level. Design management directs all these movement. But what happens in the functions and between people belongs to the area of design leadership.

Design leadership. In the literature review I expressed the complexity of finding research about design leadership. The two ambiguous areas, design and leadership, brought together have not found a common structure that would be possible to analyze as data. Some of the interviewees touched on the subject in their answers. Interviewee C explains the difference between design management and design leadership:

Coming down from design management, which is – – more about how we manage an R&D process, so that we can design the type of product that we imagine to facilitate the customer's life. This design leadership then, is about how we look at these various bottlenecks or challenges between silos. And look at it in a broader perspective, the way it affects the whole company and how it inspires people to look at the matter.
(Interviewee C)

Interviewee B adds to this comprehensive view of design leadership, that the leaders who are committed to design understand the company's background and with design mindset are ready to envision the future more insightfully. Interviewee A continues by saying:

...design leaders have the ability to link together, by using design methods, how accomplishments are achieved and anticipated better. (Interviewee A)

[Design leader] is a person who understands the different processes and approaches of design. They are able, by using one's skills to solve challenges and problems, within the company. That is, to lead the types of [creative] processes. (Interviewee C)

Interviewee A and Interviewee C agree that these abilities can be tightly connected to even one person only. Characteristically leaders are visionary, emphatic, and empowering. Thus, leadership enhances creative abilities, such as design, that require freedom for thought. This is what makes design leadership a crucial part of design management. Interviewee C says that nothing destroys the design mindset more effectively than strict guidelines and no freedom for creativity. It is the design leader's responsibility to offer the insights and resources for employees. Leadership is about the personal connection and communication leaders have with their subordinates.

The relationships created through leadership are also effective means for communication both from top-down and bottom-up. Interviewee B says that a leader should create space for conversation.

I think a good leader listens, and it is more their duty than that, we need try somehow to get the message heard. (Interviewee B)

What comes to the top-down communication, the next paragraphs will discuss how top management can promote design throughout the company by being design agents.

Design agents. It became clear in the interviews that beyond any method or a tool, people are the ones who make the difference when it comes to the strategic use of design. If the right people are not aboard with using design strategically, it will never happen. This notion was already presented in the literature review and the interviewees' experiences support it. As said earlier in the thesis, a design agent should be the one who lobbies design for the rest of the organization, makes sure that the methods are in use and the gradually lets it grow organically in the organization. Interviewee D refers to design agents by saying that "strong personalities are good tools in organizations" in creating the right mindset. By strong personalities, he means people who have a strong presence in the organization, and who are willing to commit in bringing forth design methods and oversee that the right actions are taken. Interviewee A further explains the role of design agents.

After all, it [design] is about such a non-established way of thinking and acting, which always requires that there is someone giving attention, nurturing and bringing it forward. And has the willingness to explain and tell about the good experiences [for others]. (Interviewee A)

All the interviewees agree that the most effective design agents are the ones who belong to the top management or are at the owner level. Interviewee C, among the other interviewees, says that at least there should be strong support in the management level for the strategic use of design, or for the people who are acting behalf it. Interviewee E explains that there could be people in the operational level who use strategic design methods and try to spread design mindset to the organization, but if there is no support from the top management, design will never reach the strategic level. Interviewee B presumes that being a grassroots level design agent can be difficult if the company does not understand the importance of strategic design. Still, the interviewees acknowledge that it is possible that a design agent

comes from the operational level. In fact, Interviewee D says that everyone in the organization should be some sort of design agents. Nevertheless, as Interviewee E declares “it is a slow lane” to push it bottom-up.

4.4 Creating design intensive organizations

4.4.1 Design thinking

There are suggestions for the strategic utilization of design in organizations in other forms than design strategies, if they are seen too formal and conventional. The biggest trend in the interviewees’ minds is design thinking. As stated earlier, design thinking is one means to use design strategically. Interviewee F says that design thinking should be “the way of working and thinking” in any organization regardless of the industry. Interviewee D explains that it needs to be integrated in the everyday work. Changing the mindset, from trying to repeat the previous success to seizing future possibilities, gives space for new ways of thinking. Interviewee A says that using design thinking enhances the organization’s abilities to envision the future and refers to the “what if” way of working.

...I see that design thinking and design expertise can have a very strong impact on the decisions that are made. For example, when alternative futures are envisioned and possible actions are considered, then this “what if” kind of thinking, typical for design, will be able to concretize future opportunities. In this case, we may be able to better assess and improve the level of discussion, than we would, if we had ten bullet points of what our future will be... if we have envisioned it already. (Interviewee A)

Interviewee C agrees with the others’ opinions and explains that the organizations that have never fully understood the customer viewpoint, which is essential in general in design, are the ones who utmost need design thinking. Interviewee F continues that it is catastrophic if the company does not understand that not all actions have a business goal, but are done to merely

renew the company and its abilities. Interviewee C gives an example of a situation where design thinking should be in use:

...this is my theory, see, I am not a designer... the reason why design is not used in the public administration in cities or anywhere is because officials in Finland have been taught that mistakes cannot be done. Design, per definition, is experimentation, and an official does not try anything, he does it correctly the first time. And correctly does not mean that they have thought about the customers, but rather that things go as he [the official] has promised someone else they would go, and that's it. Perhaps in the Finnish engineer oriented culture it creates difficulties since we are always searching for those in fault instead of saying: hey, that was pretty fun, but it did not work out, so let's try something else. (Interviewee C)

In turn, Interviewee B narrows down the scope from industries to functions by saying:

...basically it [design thinking] is about that, what have traditionally seen as methods typical for design, are then utilized in another [function], for example the planning of a business strategy... (Interviewee B)

Interviewee F reminds that design thinking, or other strategic design methods are not the privilege of design professionals, but should be democratized to the use of everyone in the organization. Having multidisciplinary people working by design methods is “a special feature of a truly innovative organization”, says Interviewee F. Interviewee E explains that design thinking is about anyone in the organization “thinking like a designer” and thus, the creative culture of design spreads to organizations through people.

4.4.2 Change in the organizational mindset

To make design the “way of thinking and working”, it has to begin from the change in the organizational mindset.

It is actually the creation of culture, where design should have the greatest impact, not in the design of some product, but in fact, in the creation of company culture. If the culture is not right, or even going to the right direction, then the outcomes are not going to be anything super great... (Interviewee F)

In order to understand the foundations for the change, I asked the interviewees to position Finnish companies in general, in the Danish Design Ladder (Ramlau, 2004). I conducted the interviews with the preliminary thought that the strategic use of design, and thereby the design intensity, is not in a very high level in Finnish companies. Nevertheless, the interviews proved this hypothesis only to be half of the truth. The interviewees were quite unanimous with the conception of many Finnish organizations being at least in the second highest stage; design as a process, if not in the highest; design as a strategy. Nonetheless, they admitted that this concerns predominantly the biggest, listed companies or start-ups, but not the traditional SME's. Thus, considering that, Finnish industries are mostly SME run, this tells about the distortion of the reality of the strategic use of design. Interviewee C estimates that only 20 % of the SME's use design strategically. In Interviewee C's opinion, this is far from enough. He points out that Finland used to be one of the top countries in the use of design, but currently has stagnated while the others are moving on. Interviewee A believes that:

...it has been clearly divided into companies, to whom this [the strategic use of design] is self-evident and to companies to whom it is not, and may never be. -- I think that it is quite industry-specific. And then there are those surprise companies, which you would not assume to have thought about these things, but it might be that there is just one single person, who has brought the idea to the industry, which typically does not utilize design. (Interviewee A)

Additionally, to find out if the participants vision Finnish companies being more design intensive in the future, I asked them: “How do you see the role of strategic design in Finnish companies in the future?” The answers were quite optimistic. Even though Interviewee C sees that the current situation of the strategic use of design is not in the state it should be, or where it was 10 years ago, he believes that Finland has the possibility to be the forerunner in the field, for once more. Other participants agree and say:

I see that it is quite necessary. – – People will probably start to realize increasingly that [strategic design] is required if you want to stay in the competition. (Interviewee D)

Maybe it will gain more importance – – and if thinking about our company and about the rest of the field, there is the similar idea of more and more emphasizing the customer and the customer experience, because users have more power to influence, nowadays. There is a lot of offerings and so many ways to influence just by evaluating something, so the customers and users are obtaining larger and larger role. Because of this, it is crucial for us to utilize design. It will play a greater role, so I see it. (Interviewee B)

Interviewee F expands the meaning of the strategic use of design and says that it is the ultimate way to constantly renew your company. Organizations that do not have it cannot renew themselves and will not survive the hectic pace of today’s business world. In order to utilize design and receive its benefits most of the organizations need to change the culture from the stiff and old-fashioned to more insightful and open for innovation. As said earlier, the potential is there, it just has to be seized. Interviewee F displays that “change is the state of art”. The change can happen as an internal push in proactive organizations or external pull in companies that reactively follow their competitors. Interviewee B discusses that in their organization the change has been promoted from top-down.

Originally [the push came] from the owner and thereby from the business strategy. Investing in design is defined in the strategy as an objective and an area where the company wants to devote resources. – – In my opinion, the atmosphere within the company is very opportune [for the change in the mindset]. (Interviewee B)

In Finnish context, several big traditional actors are just realizing that a change is happening and they need to participate in it.

I think that in all of these [big companies in Finland] the change in the mindset is imminent or already ongoing. And they are searching for what it [the mindset] is. In my opinion, design has now an interesting opportunity to bring its own approach angle and way of thinking [to create the mindset]. (Interviewee E)

When design is included in the business strategy and supported from the managerial level, it starts to create a design intensive organization. However, Interviewee A refers to the four powers of design by Borja de Mozota (2006) and explains that usually organizations are not ready for transformational change and they rather take a reactive role in their business environment than reinvent themselves by the strategic use of design. Interviewee D includes that this might be a “scary thing” for many organizations, especially the smaller establishments. For such companies the small adjustments in the mindset are enough as a beginning and the courage might grow with the business, eventually changing the culture. Interviewee D says that embracing the design mindset would benefit the companies greatly by opening up their vision about their business environment.

In societal level, design mindset is far from being a central feature driving the change. Thus, a proactive approach in enhancing design intensity is needed from educators and businesses regardless of their size. Interviewee E says that the traditional design agencies have not been successful enough in promoting design in societal level, but the new actors in the service design field have managed to take the spotlight.

...but I think it is a shame that these traditional design companies, I do not see them there in the field talking and being leaders, but there are these new service design companies...(Interviewee E)

Design, per definition, is crosscutting, combining multiple disciplines, and this is happening in education as well. The people who are educated in the multi-disciplinary environment are the ones who will create the new atmosphere and culture in business. Interviewee E agrees that there is discussion that is promoting design in national level, but the education has not yet reached its full potential. Interviewee C is concerned that the cycle for change is too long. The change should happen now by iterative learning and by shortening the feedback loop.

Discussion is very active between Aalto University and industries, at the moment. And everyone who has been doing something there has realized that this cycle is just too slow: if we start educating in some way now, then before it has any impact on the industries, it is way gone. (Interviewee C)

Factors hindering the change. There are several factors hindering the change in the mindset and the culture in organizations. Many of them relate to traditions of the company, organizational structures and prejudices. These include, for example, the lack of managerial support, hierarchical structures and resistance to change. One factor is the attitude towards design, as Interviewee C displays:

...some new thing, we have quite enough challenges as we try to do all this that is written in our strategy. (Interviewee C)

Interviewee B raises one particular factor that is common in big organizations: a stage-gate-model. Many organizations use some sort of stage-gate-models for their R&D projects. These models might have worked well for technology companies, but in the light of the recent trend

of design, they are too rigid. Interviewee B says that from a designer's point of view a stage-gate-model could be much more innovative.

We would be able to be more than one step ahead, if we would do the kind of active innovation work, which would take all aspects into account. – – If we would have such far-reaching innovation work, and not only this kind of systematic given list of progression order, there would be much more innovation. (Interviewee B)

Re-inventing the traditional practices and models would give way to a more innovative atmosphere. In this atmosphere experimenting, as Interviewee C sees design, would be encouraged and failure accepted. Nonetheless, Interviewee B and Interviewee A emphasize that in order to change the mindset people need to have good and successful experiences of design. This might happen by seeing how new methods enhance the outcomes of R&D processes, resulting in employees telling stories to each other about these experiences. Interviewee E includes that to make design an equal discipline with other functions, the benefits have to be visible so that they can be promoted in the organization.

Additionally the lack of understanding design as a multidisciplinary field is hindering the change in the design mindset and culture. Interviewee F says that it is very old-fashioned to be thinking that design is the privilege of designers, but many people still do. She explains that when organizations realize that all employees should do design, it means that the company is moving towards the right mindset. Interviewee E somewhat disagrees with the democratizing of design and discusses about how:

...everybody can be a designer regardless of if they have ever held a pen in their hand or not. It is as if anyone can be an engineer without knowing the basic math. (Interviewee E)

However, with this, Interviewee E refers more to the terms and titles used of designers in different fields, not so much the expertise of the people, who call themselves designers. As mentioned earlier, the field of design and the culture around it has expanded a lot in the recent years, but the right terms for the new areas have not been found yet.

Some of the interviewees see that in the design field the laws of supply and demand do not work sufficiently. This obstructs the growth of design, both in micro and macro level.

Let's say that especially in our educational system, it is much desired to educate people [designers] to the strategic direction. -- There is expertise. It is a good thing. -- But Finland is lacking of good design buyers; the shortage is pretty much on that side.
(Interviewee D)

And the supply of design, if we talk about design agencies, has not met the demand in other companies. Then at the same time, designers have not encountered jobs in companies, because the industrial companies do not have such places. This has caused the world to run past us. (Interviewee C)

Interviewee F justifies why strategic design has not spread as wide as it could by referring to history. She argues that in the 1990's, when strategic design was coming to Finland, design was defined through artistic implications and thus, got an elitist stamp. The industry itself created the mindset that design is about form and nothing else. Interviewee F debates that this was the point where organizations should have focused on strategic design methods, such as design thinking, to make the subject accessible for all actors in different fields. Nevertheless, right now when design is a trend, the industry has an opportunity to turn this around with utilizing design strategically.

4.5 Summary of the key findings

The empirical part of this thesis provided the perspectives of six design experts about the connections of design and strategy. The findings of the empirical research were somewhat similar with the discoveries of the literature review, but they emphasized slightly different factors. Firstly, in the literature review, customer focus was mentioned as a key feature of design thinking and thus, as a character of a design intensive organization. In the empirical part, the role of customer focus was highlighted and displayed separately, since the interviewees considered it as one of the most important factors in using design strategically. Secondly, the empirical part emphasized managerial support as an enabler of the strategic use of design, whereas the literature review discussed the role of design management. Nevertheless, the most significant findings of the empirical research are:

- Having customer needs in the focus of decision-making is the most important feature of a design intensive organization.
- Understanding customer insights is the most strategic benefit that design creates for a company.
- Managerial support is crucial in implementing design and its methods in organizations.
- Organizational mindset needs to be open and flexible in order to utilize design strategically and receive its benefits.
- Design thinking is a method that can be used in introducing design to the organization and facilitating the creation of the right mindset.
- The different terms of design create confusion, since design is very ambiguous area even for design experts.
- Using design strategically creates tangible and intangible benefits for the company.

When these key findings are understood in a company, the advantages of using design strategically increase. It will create value for both the company and its customer by providing solutions that are effective financially and match the customer's needs better. It will also create competitive advantage compared to other actors in the field, who are not design intensive and who do not recognize the customer needs as the foundation for their

operations. Furthermore, design-minded organizations are more open and perceptive for change, which makes them resilient in the ever-changing business environment. Some might argue that there are several other approaches, such as information technology and marketing methods, that can do what design does for organizational innovativeness and competitive advantage. However, design does not exclude these approaches, but embraces them as a part of the multidisciplinary process.

Design is no longer restraint to the form and function of items, but extends to processes, environments, and experiences. Design creates innovative solutions for complex problems, visionary scenarios for future, and creative atmospheres in design intensive organizations. Using design strategically is about looking through the windshield and seeing possibilities without historical liabilities. Not looking to the rear-view mirror and trying to keep your direction, but seeing what is in front of you and trying to envision what comes around the corner. Therefore, organizations who want to stay and succeed in their business, regardless of their industry, could benefit from the strategic use of design.

5 CONCLUSIONS

This thesis looked into the strategic use of design in Finnish companies. The aim of the research was to discover the factors that affect the design intensity of organizations. The empirical research sought answers for a qualitative research question: *To what extent Finnish companies use design as a strategic core component?* The findings present that the role of design is very diverse depending on the industry, size, management, and perceptiveness of the organization. Some companies in Finland recognize design as an important part of business that is in the center of decision-making. These companies are in at the highest step of the Danish design ladder, design as strategy (Ramlau, 2004). They are principally big global organizations, who have adapted the emphasis for design from competitors. On the contrary, the smaller actors are lacking of resources, abilities, and courage to adopt new approaches such as design, and therefore have stayed on the lower steps of the ladder. Nevertheless, there is potential to move up the ladder if the companies realize that using design strategically creates competitive advantage (Borja de Mozota, 2003) and the design mindset is embraced in the organization (Fraser, 2007). To step up the ladder, the company, its owner, managers, and personnel have to be ready for a new way of doing things. Secondly, the angle to approach the process of making the organization more design intensive needs to be considered carefully and accordingly to the company. Thirdly, design should be used strategically in every step of the process and in all ventures of the company, not narrowly in the end of the process. This would lead the company to the benefits design can bring.

The answers to the two sub-questions of the thesis were more specific by nature, revealing the factors behind using design strategically. The first one was interested in the connections of design and strategy. The literature on the topic is multifaceted. Three aspects where design and strategy intertwine, rise from the previous literature: design strategy (Olson et al., 1998; Borja de Mozota, 2003; Best, 2006), design management (Borja de Mozota, 2006; Sun et al., 2011), and design mindset (Fraser, 2007; Brown, 2008). In these three occurrences, design has a role as a strategic core component. Design strategies present the organization's vision of design actions, inputs and outcomes, and are visible evidence of the connections of design and strategy (Olson, Cooper, & Slater, 1998). Design management is a way to communicate and implement design strategy to the organization (Jun, 2008). Consequently, design mindset

occurs solely in companies that have connected design and strategy to enhance their capabilities in competition (Fraser, 2007).

The second sub-question focused on discovering the factors that affect the strategic use of design in organizations. The findings relate to the connections of design and strategy, found on the literature review, but had a slightly different view on the topics. The empirical part presented customer focus, managerial support, and changing the mindset as the features that characterize a design intensive organization. All the interviewees emphasized the importance of customer focus and said that a company, whose actions and offerings are customer driven, is a company that uses design strategically. In literature, the customer orientation is acknowledged as the key feature of design, and especially of design thinking (Brown, 2008). In turn, design thinking relates to the design mindset, without which an organization is not ready to comprehensively use design strategically. To fully utilize design in a strategic manner the organizational culture needs to be changed from rigid and hierarchical to open and flexible. Consequently, the change in the mindset can happen only if the management and owner level of the company are supporting and fostering it. Therefore, managerial support is the ultimate factor that affects the strategic use of design.

Besides answering to the research questions, the empirical data raised some issues concerning the strategic use of design in the Finnish context. There is a tendency in Finnish organizations to abandon the business ventures that do not create instant or direct tangible benefit when they encounter financially demanding times. They also hold back from investing to innovative new practices, such as design, which would be crucial for their renewal and thus, survival. Such companies do not understand that the core of change is to cut from what is becoming outdated and create new approaches that are more effective instead. However, at all events, change is frightening.

Additionally, the ambiguity of design as a concept creates problems in understanding and communicating the matter both internally and externally in organizations. Even the design experts mixed the terms of design, and some of them were not able to clarify e.g. the concrete difference of strategic design and design strategy. This creates confusion in research and in practice. Moreover, it hinders the effects that using design strategically could have in organizations, since the concept is not properly used if it is not fully understood.

Furthermore, it can be questioned whether the appropriate methods and tools are in use in organizations to bring design to their operations. First of all, literature review presented design strategy as one of the tools (Olson et al., 1998), but its necessity in practice was challenged in the empirical research. A design strategy can be seen as too formal tool that hinders the initial idea of design being free, iterative, and creative. The empirical research suggested design thinking as the suitable tool for bringing strategic design into the organizations, since it creates the right mindset. Secondly, in this research design strategy is presented as a strategic design tool that operates under design management. However, if design management is a tool to implement and push through design strategy, as Jun (2008) argues, is it then a strategic design tool rather than a means for using design strategically? Nevertheless, this paradigm could serve as a base for future research.

5.1 Limitations and further research

The focus of this thesis was on the strategic use of design in the context of Finnish companies. The empirical research consisted of an expert dataset, the perspectives of design professionals about the factors and benefits of using design strategically in diverse business ventures. Prior research in the Finnish context examined, for example design strategies as the means of product styling (Person et al., 2008) and design as the source of intangible and tangible profit (Pitkänen, 2012). In turn, the aim of this thesis was to observe the use of design from several perspectives, and to provide a comprehensive overview of the area, as no-other research had yet tackled this subject.

The thesis had some elements that delimited certain things outside the research. These restraints are mostly result of keeping the thesis compact and focused. The delimited entities could serve as foundation for further research. Firstly, this master's thesis only covers the opinions of a limited number of design experts in certain industries. To obtain a more inclusive view of the area, additional perspectives from different industries, and especially from the smaller actors in the field, should be gathered. The design experts interviewed for this thesis are mostly working in or with large organizations, and are not familiar with what the smaller counterparts are doing. Some of the interviewees talked about seminars, conferences, and other events where they meet representatives of other organizations and share ideas about

design and other issues, but otherwise the knowledge of how and what others are doing, is not transferring from a company to another. A more extensive study is needed to truly establish the state of the strategic use of design in Finnish companies. Additionally, this research focused on the thoughts of the experts and not the actual reality of operations and actions. It would require establishing proper indicators for the strategic use of design to examine this further.

Secondly, the empirical research emphasized the importance of the customer focus for companies that use design strategically. Since customer orientation was not initially on the focus of the research, it was not explicitly displayed in the interviews; instead, it came to prominence as a topic, in the data analysis phase. Considering that having the customer needs in the center of decision-making is a main character of a design intensive organization, further research about the realm of the subject would be welcomed. It was discovered that all the organizations where the interviewees were working or with whom they had been in cooperation, seem to understand the importance of the customer focus. However, in some companies, albeit the discussion about strategic design and customer focus is constantly on the table, the reality of actually using customer needs as the base for the design process is still far away. This might be due to the industry or the organization itself not being mature to make changes in practices and approaches. This phenomenon can be seen in organizations regardless of their industry. They have the intention to put the customer first, but they do not yet have the skills or willingness to do it. Therefore, this would be an interesting study area.

The third limitation was mainly due to the lack of academic research in the area of design leadership. For a subject as abstract as design, a flexible and personal management style would be suitable. Therefore, I would have wanted to do research on design leadership as an enabler of the strategic use of design. However, I did not find sufficient literature on which to base the empirical research. The topic of design leadership lacks of academic research compared to design management, and has only recently raised interest among researchers (Borja de Mozota, 2006). Thus, there is a need to discover more how design leadership is constructed in business practice. The role of leadership is not clearly understood in design management, and its full capacity is not in use yet. Consequently, the area needs further research in both, academic and empirical field.

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APPENDICES

Appendix 1: Interview frame

This interview is part of a Master's thesis that I am conducting in the Aalto University School of Business. The thesis concerns the current state of design in Finland. I examine whether design is part of the main functions, and an important element at the core of decision-making in Finnish companies. The research explores design from a strategic angle, particularly from the view of strategy practices. In addition, the empirical study examines the extent to which managerial support and understanding of design contributes to the utilization of strategic design.

Background questions: How long have you worked for the company? In which positions? How long have you been working with design? What kinds of companies you have cooperated with?

Theme 1. Descriptions, definitions

- In your opinion, what is...

- Design?
- Strategy?
- How are these two, design and strategy, linked to each other?
- Design strategy?

- Are business strategies and design strategies somehow fundamentally different?

Theme 2. The state of design and strategy in Finland; connections and evaluations

- What kind of company is design-oriented?

- What is typically the role of design in business operations?

- How can the strategic use of design influence the organization?

- Are there any features from which can clearly be seen that design is actively take into account in the strategic level? What are these?

- How do you see the state of strategic design in Finland in general currently?

- Are you familiar with the Danish design ladder? (Explanation: no design, design as styling, design as process, design as strategy)

- Can you assess at which ladder the majority of Finnish companies are?
- Why is that and where are they going?

- What kind of design strategies have you had?

Theme 3. Design strategy work

- What is design strategy work, and what does it entail in practice?

- What kinds of practices are related to design strategy work?

- Who is involved in this work?
- For what and whom are these strategies made?
- When are design strategies made or renewed?
- Is it different from business strategy work?

- What should design strategy work be in practice? What would you add or remove?

- How could design be included more to the strategy work?

- Is writing down the design strategy necessary or could there be more suitable ways to implement strategic design?

Theme 4. Design Management

- What is the role of design management in Finnish organizations?

- Where is the design function located?
- How does the location influence on how strategic role design has in the company?

- What about design leadership? What it is, is it necessary?

- What kind of participation it requires from the company's management and Board of Directors to use design strategically?

(- What is the impact of design-minded management and board?)

- Does the emphasis on design come from top-down, or can it come from bottom-up?

- Is there need for so-called design agents? What is the benefit of these?

- How do you see the future role of design in Finnish companies?

The summary of the interview, and additional comments. Is there something important, something I have not asked yet / anything to add?

Appendix 2: Themes and the initial groupings

Definitions of design

The effects/ benefits for using design strategically

The downfalls of using design strategically

Customer focus

Value creation with design

Characteristics of a design intensive organization

Definition of strategy

Definitions of design strategy

Design strategy work

The connections of design strategy and business strategy

Strategic design vs. design strategy

Is design strategy really beneficial?

The current state of strategic design in Finland

The future state of strategic design in Finland

B2C vs. B2B

Design thinking

Design mindset and change in the organizational culture

Terms and concepts

Is design the answer for all the problems?

Design management

Design leadership

Design agents